The Integrated Disability Evaluation System; The Political Life Cycle of Health Policy from Concept to Evaluation

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Abstract

The United States (U.S.) has been at war for more than a decade. Despite the fact that official U.S. combat engagement has ended, the medical and emotional costs of Operation Enduring Freedom in Afghanistan and Operation Iraqi Freedom will continue. Because of this, the military disability system and its associated benefits will be a vital aspect of re-integrating into civilians life for many veterans who are sick or injured as a result of their military service. In 2008, the military's Integrated Disability Evaluation System (IDES) was launched as a cooperation between the Department of Defense (DoD) and the Department of Veterans' Affairs (VA) with two primary goals: streamlining the disability evaluation process, and making it easier for service members who are discharging because of a medical disability to secure care and associated benefits. This dissertation provides an in-depth case study of the IDES. It is grounded in a conceptual model that reflects the policy cycle because the overarching goal of the dissertation is to close the gap between researchers and policymakers. The three manuscripts that comprise the main content of the dissertation examine IDES at distinct stages of the policy cycle. Through this approach, the dissertation illuminates the distinct portions of the cycle, informs researchers' understanding of the policy process, and identifies a role for them in this process.

My research findings are presented in three manuscripts. The first manuscript, which relied on document review, a media analysis and in-depth interviews, is focused on the policy development phase of the policy cycle and examines both the political and practical events that conspired in order for the IDES to become reality. This manuscript draws on lessons from the political science literature to explain how the IDES became the response to a broken transition process. This research showed there were three lessons from the political science

literature which can help researchers advance their work in the congressional policymaking arena: (1) timing is vital. Public health researchers must be prepared with policy solutions to problems in order to take advantage of windows of opportunity. (2) Public health researchers should understand the authorization process, and use it to their advantage. (3) Public health researchers should capitalize on "advantaged" social construction of groups when possible. If the population of interest to the researcher does not fall into an advantaged category, researchers should work with interest groups to improve the social construction of the group they seek to assist. By utilizing these lessons, public health researchers can help close the gap between research and policymaking with the goal of advancing evidence-based policy to improve the public's health.

The second manuscript reflects the assurance phase of the policy cycle by looking at the implementation of IDES. It utilizes a Community Based Participatory Research (CBPR) framework to explore the information legislators and their staffs seek in assessing the IDES. Policymakers are the community of interest in this study and, through in-depth interviews, I investigated the feasibility of engaging the congressional policymaking community in the formative stage of academic research. I found that policymakers are not only willing to participate in the formative stages of research, but that they welcomed the opportunity. Furthermore, they gave concrete recommendations for research. I integrated these recommendations into the third manuscript of this dissertation. This willingness to participate may be understood in terms of policymakers' perceptions of academia. Interviewees described academia as "credible," unbiased sources of information, and welcomed their input to policymaking. However, participants noted they currently lack access to academia. Applying a CPBR framework to the policymaking community provides a viable avenue for

researchers to engage with the policymaking process. The results of this study show that there is clearly space for researchers in the congressional policymaking process that is currently not being filled.

The third manuscript straddles the assurance and assessment phases of the cycle and it seeks to evaluate the experience of the IDES for veterans with PTSD vs. veterans without PTSD through a survey of veterans who transitioned under the new system. I was specifically interested in four domains: 1) satisfaction with the IDES 2) understanding of the IDES 3) time to complete the IDES and, 4) success of reintegration into civilian life following the IDES. Overall, those with PTSD were less satisfied with the IDES, took longer to complete the IDES and were struggling more to reintegrate into civilian life. No statistically significant differences were found regarding understanding of the IDES. Those with PTSD are a large and important subgroup and policymaker should address the needs of this population. Lessons learned in manuscripts 1 and 2 will help me disseminate this research.

This dissertation is focused on bridging the divide between research and policy making. By demonstrating that it is possible to engage in the political process as a researcher, I hope this work will encourage other public health researchers to also view the political process as a viable avenue for advancing the public's health.

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List of Acronyms

DoD	Department of Defense
EMR	Electronic Medical Record
IDES	Integrated Disability Evaluation System
GAO	Government Accountability Office
MEB	Medical Evaluation Board
MST	Military Sexual Trauma
NDAA	National Defense Authorization Act
PEB	Physical Evaluation Board
PEBLO	Physical Evaluation Board Liaison Officer
PTSD	Post Traumatic Stress Disorder
VA	Department of Veterans Affairs
VSO	Veterans' Service Organization

Introduction

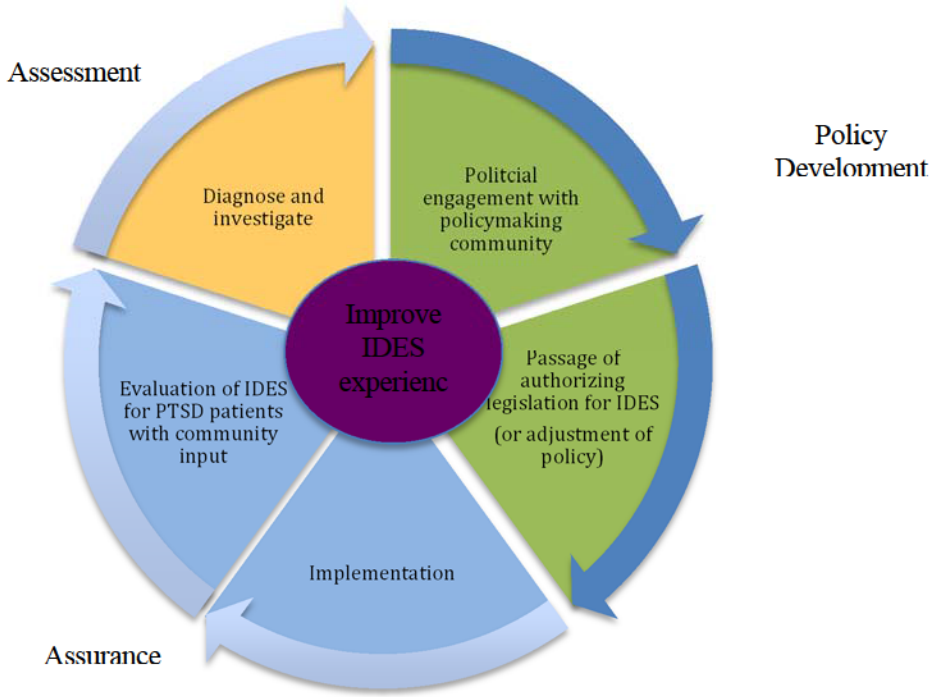
The United States (U.S.) has been at war for more than a decade. Despite the fact that official U.S. combat engagement has ended, the medical and emotional costs of Operation Enduring Freedom in Afghanistan and Operation Iraqi Freedom will continue. Because of this, the military disability system and its associated benefits will be a vital aspect of re-integrating into civilians life for many veterans who are sick or injured as a result of their military service. In 2008, the military's Integrated Disability Evaluation System (IDES) was launched as a cooperation between the Department of Defense (DoD) and the Department of Veterans' Affairs (VA) with two primary goals: streamlining the disability evaluation process, and making it easier for service members who are discharging because of a medical disability to secure care and associated benefits. This dissertation provides an in-depth case study of the IDES. It is grounded in a conceptual model that reflects the policy cycle. The three manuscripts that comprise the main content of the dissertation examine IDES at distinct stages of the policy cycle. Through this approach, the dissertation illuminates the distinct portions of the cycle, informs researchers' understanding of the policy process, and identifies a role for them in this process.

The Policy Cycle

The U.S. Department of Health and Human Services' (DHHS) model of core functions and essential services for public health was an important source for the conceptual model that guides this research (Figure 1). The DHHS model presents three main areas of responsibility for public health: assessment, policy development and assurance, which comprise the policy cycle. When legislation passes, assessment and policy development have

already occurred. Implementation and evaluation of the new policy then fall under the assurance phase. Problems will then be identified with the new policy and used to repeat the assessment phase and the cycle will begin anew (1). This Introduction will expand upon the separate parts of the policy cycle and highlight how each of the three manuscripts that comprise this dissertation focuses on different aspects of the cycle.

Figure 1.1 The Policy Cycle



Adapted from DHHS model of core functions and essential services of public health

Political influence on the Policy Cycle

However, this aforementioned cycle does not happen in a vacuum without political influence. Political scientists have developed a similar model of the policy process (2) which can help to illuminate this. According to Thomas Birkland, once a law has been passed, feedback influences the political system and the cycle begins again. Birkland also cites elections, media, public opinion, and the personal agendas of decision makers as influential to the policy making process (2). Because these influences can be vital in realizing a new

policy, public health professionals should understand the role they can play when conducting research that may inform policy recommendations. By successfully navigating this context, researchers can leverage the legislative process to improve the public's health.

Applying the conceptual model to IDES

By understanding the policy cycle and its relationship to public health policy research, practitioners and researchers can more effectively influence the political process. The IDES is an ideal case to investigate through the lens of the policy cycle for two reasons. First, garnering legislative support for the IDES required understanding of the political influences highlighted by Birkland's model discussed above, and thus can be illustrative of how researchers can navigate that process. Second, several reports and recommendations have pointed to shortcoming with IDES and the need for improvements, and the identification of problems during assessments is part of the policy cycle (3). Policymakers are aware of these concerns and eager to address them, particularly because, as evidence from this dissertation and other literature (4) will demonstrate, they identify veterans to be politically important.

Each manuscript of this dissertation expounds the IDES through a phase of the policy cycle. The first manuscript of this dissertation is about the policy development phase and examines both the political and practical events that conspired in order for the IDES to become reality. Through a review of congressional documents, in-depth interviews with legislative staff, and a media analysis, manuscript one describes and analyzes how the IDES became the response to a broken transition process. This manuscript draws on lessons from the political science literature and is intended as a guide for public health researchers as they engage the political system to promote research as a resource for policymakers.

The second manuscript reflects the assurance phase and the implementation of IDES. Through a series of in-depth interviews, manuscript 2 explores the information legislators and their staffs seek in assessing the IDES. This manuscript draws on lessons from the Community Based Participatory Research (CBPR) about how to engage a community in the research process. For the purposes of this manuscript, I consider policymakers as the community of interest and investigate the feasibility of engaging the congressional policymaking community in the formative stage of academic research.

The third manuscript straddles the assurance and assessment phases of the cycle: it seeks to evaluate the IDES through a survey of veterans who transitioned under the system and diagnose problems with the experience that can be improved through policy changes. Specifically, the survey investigates the transition experience for veterans with a PTSD diagnosis compared to those that do not have a PTSD diagnosis. The survey drew heavily from previous research on the "legacy system" which existed prior to the IDES (5), extant research on disability (6-8), and on the findings from a series of in-depth interviews conducted for this dissertation.

The three study aims, which guided this dissertation, align with the three manuscripts:
Study aim 1: With the assistance of the political science literature, identify and understand the political factors that influenced legislative support for the IDES.

Study aim 2: Apply CBPR principles to the IDES case to provide a model for better integrating research into congressional health policy formulation and in doing so, inform development of a survey to evaluate the IDES experience that was relevant to congressional policymakers.

Study aim 3: Conduct a survey to evaluate the experience of the IDES process for veterans with PTSD compared to veterans without PTSD, based on previous research and the knowledge gained in Aim 2.

This introductory chapter describes the IDES and provides context for the calls for change in the transition from the military to the VA. It then covers the topic of PTSD by

presenting the scope of the problem and a description of what is currently known about PTSD and military disability. It then moves on to discuss the historical role of Congress in veterans' health care policy and lessons from the political science literature that help to explain the congressional policymaking process. I conclude with a discussion of CBPR and its application to policymaking.

The Integrated Disability Evaluation System

The IDES was a response to problems with service members' transition out of the military and the disability evaluation process involved in that transition. Service members, the DoD and VA leadership, and members of Congress all widely recognized this transition as a source of frustration and confusion, and policy experts on the issue cited it as a reason for poor access to resources and medical care (5). However, it wasn't until the *Washington Post* published the first of a series of articles detailing "bleak" and "neglected" conditions at Walter Reed Army Medical Center that any real progress began towards a more streamlined system (9).

Before the IDES, under the "legacy system," service members were evaluated twice for disability: once by the DoD and then again by the VA. These two ratings often differed, causing confusion among service members. The "President's Commission on Care for America's Returning Wounded Warriors," commonly called the Dole-Shalala Commission after its two chairs (5), discussed the legacy system's challenges in a report which contained a system-wide evaluation. It detailed the long delays service members faced when being evaluated for disability adjudication and dissatisfaction and misunderstanding of the system. The report also contained the findings from a survey of service members who had been

medically evacuated from Iraq or Afghanistan. Less than 40% of respondents expressed satisfaction with the system, and slightly more than 40% understood the evaluation system (5). Furthermore, approximately 40% of respondents took 21 weeks or more to complete the VA evaluation process. This means a significant portion of the population waited seven months for VA payments and care at a VA facility (5).

Crafters of the IDES aimed to streamline the transition process, shorten the time to claim adjudication, and increase satisfaction and understanding among users (5, 10) by eliminating the dual evaluation process. Under the IDES, service members now receive one disability rating from the VA only and no rating from the DoD.

While the IDES holds promise for improving the lives of veterans over the legacy system, there are challenges. The Government Accountability Office (GAO) concluded in a report that the evaluation process continues to be slow and confusing (11). The Recovering Warriors Task Force, charged by Congress with overseeing the IDES in the 2008 NDAA (P.L. 110-84), described transitioning under IDES as "a lengthy and mystifying ordeal" and in 2015 made recommendations to overhaul the entire system (3). Specifically, they recommended emphasizing return to work as soon as possible and outlined 5 "hallmarks" that should be included in the new approach: standardization across the service branches; employment of an evidence based, predictable and transparent process; a structured payment for compensation for lost future pay or employment capability; incentivizing wellness by focusing on work, education and retraining opportunities; and finally having a family- and patient-centered approach (3). These recommendations highlight that this policy is still ripe for improvement.

Post Traumatic Stress Disorder

IDES is an extensive process, with many facets and Aim 3 of this dissertation focuses on the IDES experience specifically for veterans with a PTSD diagnosis, compared to those without a PTSD diagnosis (a full technical definition of PTSD can be found in Appendix A). It is essential to identify problems with the IDES for those with PTSD for several reasons.

First, several studies have demonstrated targeted, expedient care as an effective intervention for chronic PTSD (12-15). Languishing in the disability evaluation system potentially delays access to VA care and associated disability benefits. PTSD is among the top ten most common disabilities for which veterans receive disability benefits, and the second most common diagnosis for service members medically separating from the Army (the largest service branch) (16). And it is growing; the percent adjudicated for PTSD among all who medically separated from the Army increased from 20% (in the years 2008 to 2012 combined) to 31% in 2013 (16). Interview data from this dissertation also indicates veterans generally, especially those with a PTSD diagnosis are of particular interest to policymakers because this group is so large and it receives a lot of media attention. This is also noted in the literature (4, 17, 18). Despite the need for attention to this issue, we are unaware of any research that has been conducted about the experience of the IDES for PTSD patients. By targeting this group, this research will yield policy suggestions about how to improve the IDES for a large portion of the disabled veterans population.

Second, PTSD is also likely a larger issue than the disability adjudication rates indicate: while the literature varies as to the exact percentage of soldiers who suffer from PTSD, one meta-analysis found rates of 5.5% (95% CI, 5.4-5.6) in the general military population and 13.2% (12.8-13.7) in active duty infantry units (19). Another study found that

as many as 20% of soldiers returning from Iraq and Afghanistan suffer from trauma-related depression or PTSD (20). Putting this percentage in context, during the first ten years of engagement in Iraq and Afghanistan (2001-2011) the Army alone had deployed service members for more than 1.5 million troop-years (21). A troop year is a metric used to describe cumulative deployment length (1 service member for 12 months is equal to one troop-year and 2 service members for 6 months each is also equal to 1 troop-year).

Studies have shown women and men experience post-deployment PTSD at similar rates (22, 23); however, among service members who were injured during deployment, women were shown to have more severe PTSD symptomology than men (24) and experience PTSD symptoms for longer periods (25). Research also shows that a large proportion of female service members (35-86%) have experienced military sexual trauma (MST) or sexual assault external to the military, compared to a smaller proportion of men (2-16%) (26, 27). The rate of PTSD among MST victims is twice the rate in military women who have not experienced MST (26). MST has been noted as particularly traumatic compared to civilian sexual assault because there is little hierarchical support for the victim who often needs to work with her attacker (28).

PTSD and other non-physical wounds can make it challenging for returning service members to hold down a job, support a family, and adjust to civilian life (29). Furthermore, the financial and human cost of mental illness will continue to grow if untreated (30). Research has shown that those with chronic PTSD are at higher risk of chronic diseases such as diabetes and heart disease (31, 32). PTSD is also often associated with domestic violence and substance abuse (33, 34). PTSD is also a significant predictor of suicidal ideation and suicide attempts (35, 36), especially in military populations (34) and from 2001 to 2008, the

suicide rate within the US military increased by fifty percent (37). More military personnel committed suicide from 2001-2012 than died in combat in Afghanistan during those years (37).

Technical Definition of PTSD

The current definition of PTSD included in the Diagnostic Statistical Manual (DSM)-V has 6 major categories for a diagnosis: 1) stressor, 2) intrusion symptoms 3) avoidance, 4) negative alterations in cognitions and mood 5) alterations in arousal and reactivity, 6) duration, and the functional significance of the symptoms within these categories (38). Within each category, there is a specific list of symptoms. The full definition for adults as it appears in the DSM-5 can be found in Appendix A.

PTSD and Military Disability

When a member of the US military has a service related injury or illness such as PTSD, Traumatic Brain Injury (TBI) or major limb trauma, he or she is eligible for disability status. Their length of service and their level of impairment determine their compensation and care benefits. Epidemiologic research has shown that claims adjudication is not influenced by demographic characteristics such as age, gender, race or insurance status (39). However, women are evaluated for disability at a statistically significantly higher rate than men, and in the Navy and Marine Corps, women retire from the armed services due to a disability at higher rates (32.9 and 46.2 per 10,000 respectively) than men (21.4 and 35.0 per 10,000 respectively) (40). Policymakers have expressed a particular interest in how the disability system differs for women (41).

Active duty service members also receive disability retirement and evaluations at a higher rate compared to Guard or Reserve service members (40). In the Army, the rate of evaluations for disability was 39 per 10,000 among Guard and Reserve service members compared to 195 per 10,000 among Active Duty service members. Rates of retirements in the Army were 16 per 10,000 among Guard and Reserve service members compared to 66 per 10,000 among active duty service members. In the Navy, the rate of evaluations for Guard and Reserve service members compared to Active Duty service members was 30 and 77 per 10,000 respectively and the rate of retirement was 11 and 26 per 10,000 respectively. Research also shows that there are inconsistencies about how the IDES is administered for Guard and Reserve members compared to active duty members (42). Previous research on the legacy system also indicated that there were differences between these two groups in their experience of the disability evaluation system. Guard and Reserve service members reported less satisfaction with the system than Active Duty service members (5).

Questions have been raised about who seeks compensation for PTSD and why. Reasons vary but several studies have explored this question, and show that veterans who seek compensation tend to suffer from more severe symptoms of PTSD than those who have the diagnosis but do not seek compensation (43). Qualitative research on this subject suggests there are 5 interrelated categories of reasons for seeking disability status and compensation. These include: "tangible need" (health care coverage, financial, schooling/training), "need for problem identification or clarification" so that he/she is eligible for care and help with financial needs in the future, "belief that it will justify or legitimize disability status", "encouragement from trusted others" and "professional assistance" from veterans advocacy organizations (44). Survey findings acknowledge suffering and relief from self-blame as the

most prevalent reasons for seeking compensation, though financial need did increase as income decreased in the sample (45).

Research also shows that for low-income veterans with PTSD, disability benefits can be a lifeline. One study found that the odds of impoverishment were significantly lower for veterans with PTSD who were receiving VA disability benefits compared to veterans with PTSD who were not receiving disability benefits. The authors also showed that this difference was particularly pronounced among African American veterans (46). Another study demonstrated reductions in homelessness and clinically meaningful reductions in PTSD symptomology for individuals receiving VA benefits for PTSD compared to those that were not receiving benefits(44).

One concern about disability compensation often cited with regard to mental disorders and PTSD is that some individuals may be malingering in the system (45, 47). There are ways to address this concern through clinical PTSD testing (48-50).

Barriers to Care and Compensation for PTSD patients

While there is concern about service members exaggerating or falsifying symptoms to gain disability benefits, there is perhaps greater concern that individuals with PTSD are not being identified and/or accessing care. Stigma associated with mental health issues [6, 48] is the reason most often cited for this oversight. Coupled with stigma, because commanding officers and any promotion board has access to a service member's medical records, there is the added concern by service members that PTSD will harm their career and potential for advancement (20). Logistical problems such as not knowing where to seek care, or not having transportation to get to an appointment, were also barriers (20). These barriers are

particularly concerning because targeted, expedient care is an effective intervention for chronic PTSD (12-15).

Administrative barriers also contribute to service members not accessing care. Soldiers often do not receive the care they need from the VA, or there is a long delay in receiving care when they transition from the DoD (5, 51-53). Reasons cited for these challenges include problems with the disability rating system, staffing shortages, and distrust of the system (5, 51-53), which have resulted in many soldiers falling through the cracks (54).

Role of Congress

Stepping away from a discussion on PTSD specifically, the next section will address the role Congress plays in the general health of U.S. service members and their access to disability benefits. Congress has long had a role in the health care system for our nation's military personnel, largely through its responsibility for authorizing and appropriating funds for veterans' care.

In 1776 the Continental Congress voted to compensate any soldier injured in battle in defense of the colony. Since then Congress has been involved in decisions about the health and well being of our nation's service members (55). In the 1830s, Congress passed legislation shifting pension payments to compensate military personnel based on time served (56). Thus began a long intertwined history of legislators making decisions that impact the scope and amount of disability coverage a soldier receives. This is the reason this dissertation is conceptualized using a model of the policy cycle with Congress in this instrumental role.

World War I had a significant impact on the health of veterans, and Congress' response was in-line with the scope of this impact. In 1921 the Veterans Bureau Act passed in response to the hundreds of thousands of soldiers killed or wounded in World War I. This

bill created the predecessor to the VA by consolidating the Federal Board for Vocational Education, the Bureau of War Risk Insurance, and the branch of the U.S. Public Health Service responsible for veterans' care (55).

In 1930 Congress created the VA through legislation that consolidated the Veterans Bureau, the Bureau of Pensions, and the National Home for Disabled Volunteer Soldiers to create the new agency (55). In 1956, in the wake of the Korean War, the Bradley Commission was created by executive order to investigate the types of benefits provided to veterans. On veterans' programs, this Commission concluded:

> [There is an] urgent need of revision and modernization to bring them in line with the basic changes which [sic] have occurred and are still occurring in our society. There is, at present, no clear national philosophy of veterans' benefits. This Commission has endeavored to develop a philosophy and guiding principles, on the basis of which our national obligation to veterans can be discharged generously. (55)

Following this report, Congress passed the Veterans' Benefits Act of 1958, designed to address many of the concerns raised by the Bradley Commission (56), further demonstrating the impact congressional action can have on military health (55).

The Vietnam War also brought legislative changes to the veterans' health policy landscape. In 1965, Congress passed the largest national insurance program, the "Servicemen's Group Life Insurance (SGLI)" (55).

However, by the mid 1980's, instead of health benefits for veterans continuing to expand, access to VA hospitals began to be restricted. In 1986, Congress limited veterans' access to VA hospitals by specifying that only those considered indigent or disabled, and those belonging to special groups, such as prisoners of war, could receive care without payment. All others were required to pay for their treatment in full. In 1990, facing a tough budget climate and the close of the Cold War, Congress went even further when they redefined the

disability criteria. Low-income veterans over the age of 65 were no longer automatically classified as disabled, thus reducing the number entitled to VA care (57). Access to VA hospitals continues to be limited today and priority for treatment is given based on level of disability, which has proven to be problematic (58).

Congress is responsible for the authorization and appropriation of funds to care for our nation's veterans'. In this role, Congress impacts the depth and breadth of health care veterans and active duty service members receive. The IDES is yet another example of Congress' role in military health.

Lessons from the Political Science Literature

As demonstrated in the preceding section, Congress has an instrumental role in veterans' health policy. For this reason, the congressional arena is a viable avenue for improving veterans' health policy. However, if a researcher plans to take this route, he or she must be aware of political forces. Deborah Stone argues that good research alone does not lead to new or improved policy: politics is an essential part of the policy-making process (59). For example, the policy communities involved in the policy making process who influence both congress and the federal agencies are important to consider as part of this process (60). As such, there are important lessons that public health researchers can learn from the political science literature. This has been noted in the public health literature. Bernier and Clavier advocate that public health professionals use findings from political science to engage in the policy making process because it can lead to more thoughtful, policy-relevant research (61). Political science can provide insight into why politicians support certain policies, and help health researchers use evidence to move policy ideas from research to reality. Oliver argues

that a better understanding of the "political dimensions" of health policy will help researchers "conduct more realistic research and evaluation, better anticipate opportunities as well as constraints on governmental action, and design more effective policies and programs"(62). Despite the potential application of political science to use research findings to inform policy decisions, the public health literature contains few examples of this (61, 63, 64). Of note, one law review article, by Rutkow *et al.* reviewed vaccination policy and the political factors that contributed to changes in that area (65). Barry *et al.* examined the political factors that led to changes in mental health parity laws (66). This paper adds to these contributions with a case study that draws on lessons from the political science literature to understand how and why IDES was realized through policy action.

I've identified three lessons from the political science literature that help to explain how a researcher might utilize aspects of the political system to changing health policy: 1) timing is important (67); 2) the social perceptions of the group targeted for assistance can aid or hinder legislative success (4); and 3) reauthorization legislation is an important vehicle for accomplishing change (68). The application of these lessons will be discussed as it applied to IDES in manuscript 1 but I will introduce them here.

John Kingdon, among other political scientists (69), teaches us that timing is important. Kingdon describes what he calls a "window of opportunity." In order to create a "window" there are three streams at work: a problem stream, a policy stream, and a political stream. A problem stream represents a defined problem that requires a solution; a policy stream is an available policy that would address the problem; and a political stream is the political will to make a change (67). When these three streams converge for a particular issue it creates a "window of opportunity." Recognizing and taking advantage of points in

time when a policy window is open can make the difference between realizing a new law, regulation, or policy and failing in that effort (67). Kingdon, as well as other political scientists (69) describe crisis events as one way that policy windows open and decision makers become more open to policy ideas and related research. Kingdon also described scheduled events, such as an annual budget bill, as a time that a window might open.

Authorizing legislation is on a scheduled timeline and is often tied to the operation of a federal agency. Congress considers authorizing bills such as the National Defense Authorization Act (NDAA) annually; its passage is needed for the DoD to function. Political scientists Adler and Wilkerson have also demonstrated that authorizing legislation presents an opportunity for new policy proposals. The prominence of authorizing legislation is illustrated in their work: one study attributed nearly two thirds of votes on the House floor to reauthorization legislation (68). But it isn't just recognizing timing, it is also knowing how to utilize the authorization process specifically. Because authorizing legislation is something that "must pass," in an era of increased partisan polarization "policy-making attention" may increasingly shift to "recurring and necessary temporary legislation" such as authorization legislation (68). From a practical standpoint, if a new policy is even tangentially related to an authorization bill, legislators are well served to position that bill as part of a larger authorization. Recognizing good timing, and identifying a potential authorization bills as vehicles, however, are not sufficient to pass legislation.

The role of stakeholders associated with a policy proposal, how they are viewed, and their level of influence over policy makers is a central explanatory factor in Schneider and Ingram's work. Social groups, such as veterans and military personnel, can be either positively or negatively socially constructed by "politics, culture, socialization, history, the

media, literature, religion and the like" (4). They postulate that political power is derived from this social construction in concert with other factors such as money and reputation in Washington, DC. Veterans and the military fall into the "advantaged" group according to Schneider and Ingram because they have power in the form of a well-established interest group and they are positively socially constructed. This means that politicians are going to be inclined to pass legislation that supports these groups (4). Schneider and Ingram identify three other groups in addition to the "advantaged" group: contenders (negatively constructed but powerful), dependents (positively constructed but weak), and deviants (negatively constructed and weak) (4). These three groups are less likely to be associated with successful policy proposals because of their social construction.

Community Based Participatory Research and Policy Research

Congress is instrumental in decisions about veterans and military health care policy. In addition to identifying lessons from the political science literature to help bridge the divide between practice and research, in this next section I also present a framework for researchers to work with congressional policymakers to produce more policy-relevant research.

An improved understanding of congressional perspectives was vital when identifying topics and formulating questions for the survey conducted to address aim 3 of this dissertation. However, guidance from the literature about how to work with policymakers is limited (70). Current research shows that policymakers often learn about academic research through lobbyists (71), think tanks, employees in the executive branch, universities, and corporations (72), generally after the research has been published.

Sorian et al. and Colby et al. studied how health researchers could best convey research findings to policymakers. They both concluded that it is more effective to communicate findings in a concise fashion and relate that to current debates than it is to present detailed

findings that are not tied to issues under consideration (73, 74). Policymakers have limited time and receive large volumes information about health research (73). They also found policymakers do not rely on the peer reviewed literature for information and instead found professional organizations to be the most trusted sources of information (73). Research also shows that personal contact with policymakers can be important to bridging the divide between researchers and policymakers in a way that increases the likelihood that research will inform policy decisions (75).

In order to advance this aspect of the literature, and to provide public health researchers with guidance for engaging with policymakers, this dissertation used a community-based participatory research (CBPR) approach to accomplish Aim 2. The basic premise of CBPR is that a more just and effective intervention will result from including community participants in all stages of the research process. This includes intervention development, delivery, and evaluation. If a community is involved and engaged in the research process throughout, they have a vested interest in the intervention and will be more engaged in assuring and promoting its success. Researchers also stand to benefit from an engaged partnership with community stakeholders because they can learn from communities about their needs, priorities, and functioning, and this information can improve the overall quality and responsiveness of resulting interventions (76). CBPR acknowledges that the researcher is always subject to social construction in any type of research and embraces this by integrating the constructs of the community of interest into the research process (77). While this approach has historically been applied in public health to address health disparities in marginalized communities, it stands to reason that this way of thinking about research can be transferred to policy research. By treating Congress as the community and involving legislators in the research process,

members and their staff can engage in the research process in a way that connects them more directly to research aims and resulting findings. In the present study, legislators and staff helped to identify topics for the survey conducted in response to study aim 3 and develop questions for inclusion on the survey that would be useful when developing new policy and/or modifying existing policy. In this way, the research presented herein offers a more applied approach for health policy research that is modeled on the CBPR tradition.

Israel et al. outlined nine key principles governing CBPR (78). However, in describing these nine principles they emphasize that aside from the principle of respecting the input and involvement of the community, "no one set of community based participatory research principles is applicable for all partnerships" and they emphasize the important role of the researcher in taking into "account the local context of each partnership" (78). Of the nine principles outlined, seven are applicable to partnering with congressional decision-makers.

The Community as a Unit of Identity: Recognizing the community as a unit of identity allows the researcher to work with the community in moving toward collective engagement. In the case of health legislation, it allows the researcher to consider disparate views among members of Congress and aims to develop research questions that will better impact this community's decision making in addition to filling a need within the literature.

Build on the "strengths and resources of the community" (78): This second principle recognizes there are relationships and resources from within the community who can assist with developing the research, implementing the intervention, and evaluating the result. This CBPR principle explicitly encourages building on existing relationships to "contribute to the ability of community members to work together to improve health" (78). In the federal policy

making setting, this principle acknowledges the relationships and power dynamics in Congress that are important to achieving more applicable research.

CBPR facilitates collaborative, equitable partnership in all phases of the research (78)**:** Researchers should "focus on issues and concerns identified by community members," and "create processes that enable all parties to participate and share influence in research" (78). "All parties" in the context of the present research includes those committees, legislators, agencies and Veterans Service Organizations (VSOs) engaged in veterans' health care policy. While including a multiple stakeholders' presents challenges given congressional power dynamics, by better integrating disparate views into the research process, an expanded group of policymakers may be amenable to the research results.

Promote co-learning between the researcher and community (77, 78): Where the community is Congress, a CBPR approach provides the researcher with an opportunity to learn about policy development. For instance, this means the researcher learns from the community of policymakers about specific areas of a topic on which policymakers need information, stakeholders involved in that topic, public perception of the topic and legislative context for the issue. In turn, members of Congress and their staff bolster their knowledge about research and how it is conducted and gain information they are otherwise missing on the topic area. Theoretically, conducting research in this way will allow public health investigators to learn how to best promote a policy intervention while taking political considerations and processes into account. It will also allow members of Congress and their staffs to learn how to access and communicate with researchers to facilitate research that will inform policy decisions.

CBPR involves system development through a cyclical and iterative process (78): This principle is well suited to the policy process because, as is described through the conceptual model for this study, the policy process itself is cyclical and iterative. This iterative dialogue may occur during the specific phases of the policy cycle to develop a policy and may also occur at the end of the policy cycle, before it begins again, to alter a policy and ultimately improve it. By researchers involving themselves in the process in this way they can help to generate more policy relevant research that will then encourage more policy rooted in scientific research.

CBPR disseminates findings and knowledge gained to all partners and involves all partners in the dissemination process (78, 79): This principle builds on the idea that research is iterative and cyclical. Sharing results and acknowledging the community's involvement in the research process is vital to continued involvement in the cycle. In the case of congressional decision-making it is also critical to improving policy. Without this information exchange, there will be no improvement of policy based on the results.

CBPR is "long-term" and requires "commitment" (78, 80): Acknowledging that change (for both program and policy interventions) can be slow and may require time to come to fruition is important to setting expectations and emphasizing the value of investing in relationships that will ultimately be trusting and productive. As policy ideas are shared and debated, and those ideas turn into concrete actions, researchers can bring the literature to policymakers' attention and in this way foster change.

While a CBPR framework, to our knowledge, has never been applied to the congressional policymaking setting prior to this dissertation, it has enormous potential. Many

of the basic principles and all of the core values can be translated to this setting. In doing so this approach can help bridge the divide between policymaking and research.

Conclusion:

This introduction drew on a diverse body of literature to discuss the IDES, the policy cycle, Congress' role in veterans' health policy, potential lessons for public health researchers from the political science literature, PTSD and CBPR. This breadth of literature was required to execute this dissertation because the manuscripts contained herein are centered around a conceptual model that also drew on a diversity of literature. The reason for doing this is to demonstrate the entire life cycle of a health policy, which is not just limited to one body of knowledge. In doing so, this dissertation demonstrates several aspects of the policymaking process in an attempt to bridge the divide between practice and research. With this dissertation, I endeavor to demonstrate that there is value, and even perhaps a responsibility by researchers to be engaged in the policymaking process as a way to advance the public's health.

Dissertation Methods

Because the overarching goal of this study was to investigate the interaction of research with the political policy cycle as described previously in the introduction chapter (figure 1.1, page 2), we selected a case-study approach to investigate the development and evolution of IDES. The case-study method allows for a deep understanding of a case or cases "bounded by time, place or context" (79). Because I aimed to gain an in-depth perspective on the IDES and understand several facets of the policy process, this was the ideal method for accomplishing the three study aims of this research.

Study Aims 1 and 2

The first two study aims and corresponding research questions for this research are included below.

Study Aim 1: With the assistance of the political science literature, identify and understand the political factors that influenced legislative support for the IDES.

1. What were the legislative actions taken to accomplished the IDES?
2. Politically, why did the IDES receive support?
3. What lessons from political science literature help me to understand why IDES received support?

Study Aim 2: Apply CBPR principles to the IDES case to provide a model for better integrating research into congressional health policy formulation and in doing so, inform development of a survey to evaluate the IDES experience that was relevant to congressional policymakers.

1. How can policymakers be effectively engaged in the formative stages of research?
2. How do congressional policymakers consider research in the context of policy decisions?
3. What kind of input into the research process do policymakers provide when invited to participate?
4. What value do policymakers add to the research process?

5. How does a researcher utilizing a CBPR framework impact the policymaking process?

I used qualitative methods to address both study aims 1 and 2. Qualitative methods are well suited to addressing research questions that are best investigated in the context and allow unexpected, yet relevant data to be revealed and incorporated into the study (81). The iterative nature of qualitative research allowed me to be more flexible with my interview questions as data emerged (81), which was important due to the underexplored nature of this topic. Furthermore, it would have been difficult to adhere to CBPR principles, discussed in the introduction chapter of this dissertation without a data collection approach that allowed for participants' perspectives to be heard in their own words as in-depth interviews allow. The direct input of lawmakers and their ability to speak freely without being bound to pre-determined questions was early on deemed vital to the success of the proposed research.

Qualitative data yield enormously rich results. Researchers have used interviews and political ethnography when studying Members of Congress. These multi-layered results come from placing data in context and collecting data with "thick description" (82). According to Geertz, thick description can illuminate the meaning of an action beyond the action itself, as demonstrated in his description of a wink. A wink, in its most basic form is a "twitch" (82) of the eyelid. Without context, the researcher doesn't know if the wink was meant as flirting, teasing or simply just an unconscious action by an individual who has something in their eye (82). In politics, where actions cannot always be taken at face value, the contextual information gained through qualitative data collection is especially valuable for drawing conclusions about how and why something happened. This contextual data can

reveal a true picture of the underlying "power dynamics" and "motivations" (81) involved in the decision to advance the IDES.

Methods used in Study Aim 1

For study aim 1, I used congressional documents, media reports, and semi-structured interviews to recount the events leading to the development, passage, and implementation of the IDES. As part of study aim 1, I sought to understand how the political science literature can aid researchers interested in sharing with policymakers the available research concerning topics under consideration. For this reason, the document review and interview methods incorporated considerations from the political science literature. Meaning, political science literature guided the research questions and analysis.

Document Review

Document review began with a thorough reading of the Presidential Commission on Care for America's Returning Wounded Warriors Report released in July 2007 (5). The report is commonly referred to as the Dole-Shalala report after its two chairs. The full-length report is no longer available to the public but I was given the document by one of the authors, Dr. Sue Hosek. Upon beginning this research, several people familiar with military disability told me I should speak to Dr. Hosek, a Rand Corporation employee and is well known and extensively published on the issue. She sent me the report, along with other essential readings. The report was the ideal starting place because it included an overview of the major events that shaped veterans' disability laws and regulations prior to 2007, and recommended changes in disability assignment, some of which were realized in the IDES (2). It was also the last major evaluation of the legacy system before the move to the IDES.

Based on the Dole-Shalala report, I developed a set of key words to identify congressional documents related to the development and passage of veterans' disability policy in general, and the IDES in particular. Search terms included: "wounded warrior"; "disability AND veteran"; "Dole-Shalala;" and "Walter Reed". I then searched ProQuest Congressional, an on-line database of congressional records (83). Congressional records include records of floor proceedings and committee hearings from the United States Congress. ProQuest is the most complete database of congressional records. This is an established method for searching congressional documents for academic research (84).

I began the search in January 2007 because it included the one-month period before a *Washington Post* story detailed the "bleak" (9) conditions at the Walter Reed Army hospital. The article described service members languishing in a health care system ill-equipped to respond to their needs (9). The *Post* coverage captured the attention of policymakers and the public, and is cited in the Dole-Shalala report and in the media (85) as the impetus behind the Dole-Shalala Commission (5).

I used an iterative process to guide the document search (81). As I conducted the document review, I added new search terms based on words that appeared frequently in the documents that I was reviewing. The final set of terms included: "Integrated Disability Evaluation System"; "Walter Reed AND Building 18"; "Walter Reed AND Condition"; "Walter Reed AND Deplorable"; and "Dole-Shalala". I determined, based on the title, short description of the document and a key word search of the document, if it included content about the development and passage of the IDES. A key word search is a function on Google Chrome (86) that allowed me to quickly identify the search term I

was looking for in the document. I then cut and pasted relevant documents into a Microsoft Word (87) file in chronological order.

I then searched Congressional Committee websites and veterans service organizations' (VSO) websites for additional material. The ProQuest search returned congressional hearing information, but the records were not always complete. Sometimes the search did not return the entire record for a hearing and only included one person's testimony or the section of testimony where the search term appeared. Often VSOs and committees will post complete testimony to their own websites. I also searched the Government Accountability Office (GAO) website, as GAO representatives evaluated the IDES pilot and testified before Congress about their findings (54). Searching the GAO website yielded testimony on the IDES, and GAO reports on the topic. All of these documents, except for the GAO reports, were then added to the Word document in chronological order. It was noted in the Word document when a GAO report had also been published on the topic. I used a Word document to do this because it was an easy place to gather all of the information into one source. Based the identified documents, we developed a timeline of key events in the history of the IDES (Appendix B).

Media Search

John Kingdon, a political scientist whose work I considered while investigating aim 1, describes the media as an important factor in understanding the timing of legislative attention to an issue. As such, it was vital for me to understand the media's role in the IDES. Media can also help to inform how the sequence of events surrounding the IDES occurred, as congressional testimony alone does not provide a complete picture. I used LexisNexis (88) to conduct a media search. LexisNexis is an established source for

media research (89). The search included specific national print media (*New York Times, Washington Post*) and wire services (Associated Press Newswire, McClatchy-Tribune News Service), as well as periodicals written specifically for those who work in politics (*Newstex Congressional, Politico,* and *The Hill Newspaper*). I selected these sources based on my prior experience as a legislative staff member from 2005 to 2010 and most importantly, as a Press Secretary for a Member of Congress from 2007 to 2010. These include sources that are delivered daily to every congressional office. In my capacity as a Press Secretary I learned that having a story published in one of these papers may not garner much attention from the American public or mainstream media, but these sources can be essential in mounting political support for an issue.

The search spanned January 2007 through June 2014 and I used the same terms from the congressional records search. I scanned the article titles for relevant content (i.e., Walter Reed, veterans, disability, or language related to the transition of military personnel included in the title), and eliminated duplicate articles. I read this subset of articles to ensure they were relevant and eliminated those that were not. During this phase, I also made notations and highlighted sections of articles to point out key events, quotes and opinions on the IDES so that it was clear to me why the article was relevant to the study. These articles were then assembled chronologically, and I integrated key events discovered in the close read of the articles into the Word document timeline previously described.

Qualitative Methods used in Study Aims 1 and 2:

I conducted semi-structured interviews for both aims 1 and 2. For study aim 2, I relied exclusively on interview data. Interviewees were the same for aims 1 and 2. There was not a separate interview guide for the second study aim and all questions for both aims were asked in the same interviews.

Interviews

To answer the aforementioned research questions, we conducted a series of in-depth, semi-structured interviews using an interview guide developed by me in conjunction with members of my dissertation committee. I conducted all interviews from November 15, 2013 to September 30, 2014.

Interview guide

The interview guide was based on the political science literature (4, 67, 68, 74), findings from the document and media review, and foundational CBPR literature (76, 90). I developed the initial interview guide and then my committee reviewed and provided comments, which I incorporated into the next version. I then pilot tested the interview guide with two individuals who worked in Congress on veterans' issues. Their feedback was incorporated before interviews with the sample began. Due to the iterative nature of qualitative methods, the interview guide evolved over the course of data collection to include information gleaned from previous interviews (81). For instance, questions about participants' views on academia (as opposed to research generally) were added after interview 10.

My advisor also read the transcripts from my first two interviews in the sample and assisted me with refining my interview technique. In these first two interviews I was using closed-ended probe questions, a habit I tried to eliminate in later interviews (91). Open-ended

questions where the respondent uses their own words are preferable in qualitative research that aims to achieve a deep understand of the study topic. The method is designed so that the participant answers "on their own terms and how they make meaning of their own lives, experiences, and cognitive processes." To this end, I strived to let the participant talk as long as he or she felt necessary to accurately convey their perspectives on a question. As a result, interviews often lasted sixty minutes or more. The longest interview lasted ninety minutes.

The interview guide encompassed 3 domains: 1) background information on participants and their involvement with the IDES; 2) views on the IDES and its future; and 3) the role of research and researchers in policymaking. Within domains, participants were encouraged to discuss issues most relevant to them. The final interview guide is included in Appendix C.

Sample

My final sample included informants identified through their positions and reputation (purposeful) as well as through the networks of those involved with the IDES policymaking (snowball). Purposeful sampling is when participants meet very specific criteria determined before data collection begins (79). Snowball sampling means I identified additional individuals for inclusion through suggestions by those that I had already interviewed(79).

I identified the following committees relevant to legislative action on the IDES: House and Senate Armed Services Committees (HASC and SASC); House and Senate Veterans Affairs Committees (HVAC and SVAC); House and Senate Appropriations Committees. Members and staff serving on the identified committees when Congress was considering the IDES policy (2007-2014) were eligible to be interviewed. To be eligible for the purposeful sampling phase of the interview protocol, I chose individuals from these

committees who had worked on the IDES and/or worked on subcommittees responsible for the IDES. I utilized relationships I had made while working as a staff member for a member of Congress to secure these initial interviews. My first two pilot interviews were with personal friends who both worked on Veterans issues for Members of Congress on the aforementioned committees and they assisted me with contacting individuals I had identified for purposeful sampling. During interviews, consistent with snowball sampling techniques, I asked for suggestions of people who had important and relevant policy experience with the IDES and could substantively contribute to my study. Generally, these recommended individuals were employed by the pre-identified committees or by members of Congress who served on the pre-identified committees. Three individuals worked for organizations that support the military or veterans as opposed to Congress. Because of their relevant experience with the IDES, these three individuals were included in the sample. Interviews were conducted until I reached data saturation. Data saturation means that no new substantive information will be gained from additional interviews (81).

Based on the principle that qualitative research should include "rival views," (81) I interviewed Democratic and Republican staff from the House and Senate. This was particularly important because while I was in the process of conducting interviews, there was another scandal with VA medical care, this time at an Arizona VA hospital (92). This generated a large amount of media attention and the Secretary of the VA resigned. Veterans' issues became far more polarized during this time, with both political parties pointing the finger at the other for problems at the Arizona facility (58).

Interview Data Management

I digitally recorded all of the interviews (with interviewees' permission) and they were transcribed using a paid transcription service. I checked a subset of the transcriptions for accuracy and corrected as needed. I used an iPhone to record all of the interviews and the device was placed on a desk or a table near the participant during the interview. I used an application called iTalk (93) to record the interviews because it allowed for a higher recording quality than the standard program that is provided by Apple on all iPhone products. All interview transcripts were then uploaded into NVivo10 (94), a software package designed to manage and analyze qualitative data.

Interview Analysis

The data were analyzed using an iterative process (81), meaning the data were analyzed and then re-analyzed as a codebook was developed.

For aim 1, interview data were coded at one level, using open coding and NVivo10 software (94), with the goal of addressing gaps within the legislative history. Open coding is a process of developing codes to capture recurring information of relevance to the research topic and codes are closely related to original source data (81). One example of information gained at this phase was identifying the pivotal stakeholders in advancing the IDES behind the scenes. Open coding occurred after each interview to identify new information that may have required interview guide modifications. In aim 1, interview data were used to fill in gaps in the timeline and understanding of how the IDES was politically realized.

For aim 2, I coded the data at two levels, beginning with open coding (81). After completing data collection and open coding, I conducted categorical coding. Categorical coding, which is a higher conceptual level of coding, took into account similarities across codes (81). One example of information gained at this phase of coding was methods

academics might use to engage policymakers in their research. This coding was done in an iterative fashion and a codebook was developed. Codes were both deductive and inductive, meaning some codes were based on interview guide questions and some emerged directly from the data. The complete codebook for both aims 1 and 2 is included in Appendix D.

For aim 2, codes were then arranged hierarchically (81), meaning a table was created with all open codes arranged under one or more categorical codes. Within the categorical codes, those that were conceptually similar were grouped until themes were identified. Data were then reassembled according to these themes (81). Three sets of tables were constructed until I felt that the themes made sense and the groupings provided a larger contextual picture in which to consider the case study. I arranged the categorical codes in NVivo 10 but, as themes emerged, I found it easier to hand write tables with the themes at the top and the categorical codes and open codes in short hand below. This made it easier to see everything in one space and I found it easier to think this way compared to the somewhat disjointed presentation in NVivo. The results for aim 1 can be found in the "Manuscript 1" chapter of this dissertation and the results for aim 2 can be found in the "Manuscript 2" chapter.

Aim 3 Methods

The 3rd study aim for this dissertation was to produce a quantitative evaluation of the IDES experience, comparing those with PTSD to those without PTSD. Aim 3 was intended to incorporate lessons learned in aim 2 so that the survey collected information policymakers would find useful and interesting. I hypothesized that those with comparing those with PTSD to those without PTSD, PTSD would be less satisfied with the IDES, have a worse

understanding of the IDES, take longer to complete the IDES and have a harder time adjusting to civilian life.

Strategic Partnership

In order to conduct this type of quantitative study, I needed access to a large population of disabled veterans who had separated from the military for medical reasons. I first attempted to create a partnership with the Veterans Administration and the Department of Defense but I was unsuccessful and it was suggested to me by a member of my committee and a staff member at the Veterans Administration that even if I was able to get permission it may take several years to clear their Institutional Review Boards. Given this, I determined my best and most feasible option for conducting this study was to partner with a VSO and conduct a survey. Many VSOs, particularly those that are national in scope, have large databases of veterans and extensive information on their members. Furthermore, many require proof of veteran status in order to be a member.

After several meetings with three different VSOs, a partnership with a national VSO was established. I first made contact with an individual the partner VSO through a contact I had at the Rand Corporation while I was developing the research questions for this dissertation. This contact introduced me to the person at the partner VSO in charge of data collection from their membership base. The partner VSO fields a large annual survey every year and has worked with researchers at Rand in the past to field surveys. I spoke to the contact at the partner VSO about my dissertation and she asked me to submit a proposal detailing the scope of the proposed work. After conversations with the leadership team at the partner VSO, they decided my study was beneficial to their membership and agreed to field the survey for me.

Per our agreement, the partner VSO would use their software license with Qualtrics (95) to distribute the survey via email and compile the survey panel for me. I was responsible for building the online survey, and specifying the demographic breakdown of the panel. I would be given full access to the resulting data. I was originally approved for 300 people in my sample but, after discussions about response rates, the number was increased to 1,000 people. Approval was obtained from the partner VSO's marketing team for this change. The partner VSO was also given several opportunities to add to the survey or comment on questions. Changes to the survey were made based on their feedback. Recruitment materials were also created in conjunction with the marketing team at the partner VSO. I provided them with a draft of the original recruitment email and they added their own header and footer to the email and clarified some of the language. Shortly before the survey was scheduled to go into the field, changes to the leadership team at the partner VSO required a re-approval. I submitted a second proposal and approval was again granted.

After the six-week survey period ended, I received the data in Microsoft Excel (96). The partner VSO had no input on the resulting analysis, though as per our agreement they are permitted to use the results of my survey for their own purposes. They also have the option of being recognized in any resulting manuscripts or remaining anonymous. They chose to remain anonymous.

Instrument Development:

After the interviews for study aims 1 and 2 were completed and analyzed and after the relationship with the partner VSO was established, I began building the survey instrument (Appendix E). I built a conceptual model (Appendix F) and then I began reviewing the instrument used by Dole-Shalala commission. This instrument had previously been utilized

to evaluate the legacy system before the transition to the IDES (5). I added and subtracted to this instrument based on my conceptual model. First, I added questions to screen participants for inclusion criteria. I wrote these questions with the assistance of a Rand Corporation staff member and a member of my committee. I then removed some items and added others to the Dole et al. instrument based on my findings from the second study aim and my hypotheses that those with PTSD would have a worse experience in the IDES. For example, in study aim 2 I found that family involvement in the process and outcomes were important aspects of the IDES experience that policymakers were interested in but were not included in the Dole et al. instrument. After consultation with committee members about established items to measure social support and health outcomes, their suggested measures were added to the instrument to collect this information. These measures were taken from the Behavioral Risk Factors Surveillance System (97) and the Veterans Rand 12 Item Health Survey (VR-12) (98). I altered these items so the language would apply specifically to those who had gone through the IDES.

Established measures were also added to collect demographic data such as housing status and ethnicity (6). These measures had been used previously with veterans by the military's Defense Manpower Data System (6, 99). I added these questions because these are potentially confounding variables and I wanted the ability to incorporate them into my analysis. I also added the four-question PTSD screen used by the military (97). I added this measure because, while the partner VSO's data had information on whether a participant had PTSD, it was self-identified by the participants. For reliability issues, I felt it was important to also screen the individuals for PTSD status. Originally I was going to add the PCL-M (100), which has better sensitivity than the four-question screen but it is a long instrument (17

questions) and my contact at the Rand Corporation, who has surveyed this population extensively, informed me that Rand generally uses the four-question screen. After consultation with my committee, it was determined that the four-question screen was the best fit for my survey. I also added a pre-established question about current diseases and injuries among veterans (8). I did this because I was concerned that other illnesses, particularly other mental illnesses, were confounding variables and I wanted to have the option of including them in my analysis.

Items from Dole et al. were also altered to allow for greater detail than in the original survey on the legacy system (5). To do this, I took measures that were in the Dole et al. study and instead of asking generally about the disability evaluation process, I asked about a specific stage in the process. For instance, instead of asking, "Were you asked to resubmit any records or documents you (or someone helping you) had already provided?" with the response options "yes," "no," "refused," and "don't know," I asked, "As part of the Medical Evaluation Board (MEB), were you asked to resubmit any records or documents that you (or someone helping you) had already provided?" with the same response options. I also added items that asked about assistance with the process by PEBLOs, case managers and the VA benefits managers. In addition I altered items from the Dole, et al. study (5) to create these measures. For example, the Dole et al. instrument included items about service members' experiences with health care providers and asked them to rate specific aspects of those experiences. For instance, they were asked to rate their agreement with a statement about the health care provider treating them with dignity and respect. I altered this question so that it was asking about PEBLOs, case managers, and VA benefits managers. I also added aspects of that experience based on my conceptual model such as, the statement the PEBLO

"provided me with information about the process" and asked them to rate their agreement with the statement. I did this because policymakers expressed a specific interest in how well these individuals were assisting with the process. Table 2.1 demonstrates the measure domains, the source of the items and the reasons for including the domains.

Table 2.1. Survey Domains

Domains	Reason for inclusion	Quantitative implementation of domain
Clarity of the IDES process	• Qualitative interviewees indicated this was important • Builds on prior research by Dole, et al.	• Questions included in survey that break down IDES into each individual piece how well the individual understood those pieces of the process
Satisfaction with the IDES process	• Qualitative interviewees indicated this was important • Builds on prior research by Dole, et al.	• Questions included in survey about how well IDES met expectations, both overall and the individual pieces • Questions included in survey that ask about how the individual was treated while in the system • Survey questions about the support the individual received from case care managers and others assigned with assisting with the process • Survey questions about how well informed the individual was about their case during the process • Survey question about how well family members were integrated into the process
Length of time to complete the IDES process	• Qualitative interviewees indicated this was important • Builds on prior research by Dole, et al.	• Survey questions about the length of time it took to complete each portion of the IDES
How well the veteran is doing transitioning into civilian life	• Qualitative interviewees indicated this was important	• Survey questions about the physical capabilities of the veteran now • Survey questions about any

		mental health problems inhibiting daily activities • Survey questions about what activities the veteran is involved in such as school or work

After the survey instrument was developed, members of my committee and Rand staff reviewed it and provided feedback. Rand staff expressed concerns that four questions did not collect information that could be translated into policy and that, in keeping with established methods to measure satisfaction domains of patient experience, I needed to break down the experience into even smaller categories (101). With the assistance of my committee and a Rand employee, these questions were altered so they were more specific. For instance, instead of stating, "The MEB evaluation was fair" and asking the participant to rank agreement with the statement from strongly agree through strongly disagree, I created two items that stated: "The MEB process was fair" and "The MEB final determination was fair" and again asked participants to rank agreement with the statement from strongly agree to strongly disagree. This gives policymakers a better understanding of whether people are satisfied with the evaluation process and their disability determination separately. This has policy implications for where to seek improvements.

After the instrument was completed, it was then distributed to five individuals who served in the military and were familiar with the terminology and the IDES process. It was then pilot tested by 2 individuals who had direct experience with the IDES system and their feedback was incorporated into the survey. Nine individuals then tested the online survey to ensure that the instrument and the associated demographic data uploaded correctly to the database. All of these individuals were familiar with the IDES and also were able to provide feedback on issues with terminology.

Measurements:

As previously discussed, my main modifying variable of interest was PTSD. I selected PTSD as the main variable of interest because a delay in care and confusion with IDES is potentially detrimental to PTSD patients because targeted, expedient interventions are important for effective treatment (12-15, 102). Furthermore, a system wrought with confusion may be particularly challenging for individuals with mental illness. PTSD is also among the top ten most common disabilities for which veterans receive disability across the four service branches, it is the second most common for the army (which is the largest service) and in the last year, the percent adjudicated for PTSD out of all those that were medically separating from the army grew to 31% (as compared to 20% for the combined five years prior). Furthermore, it was found in study aim 2 that PTSD patients are of particular interest to policymakers. Despite this, to my knowledge, no research has been conducted that specifically investigates the experience of the IDES for PTSD patients compared to patients without PTSD. I hypothesized that those with PTSD would be less satisfied with the IDES and would also find the system more confusing and it would take longer for them to complete the steps in the process.

The partner VSO pre-identified this variable in the data before the survey was distributed based on their own enrollment application. All individuals are asked to self-identify if they have PTSD when they apply for membership to the partner VSO. PTSD was also re-established in the data utilizing the aforementioned four-item screen for PTSD used by the military (97).

I was also interested in gender as a secondary modifying variable because while studies have shown that women and men experience post-deployment PTSD at similar rates (22, 23),

among service members who were injured during deployment, women were rated in the disability system as having more severe PTSD symptomology (24). Furthermore, it has been shown that women experience PTSD symptoms longer than men (25). Research also shows that a large proportion of female service members (35-86%) have experienced military sexual trauma (MST) or sexual assault external to the military, compared to a smaller proportion of men (2-16%) (26, 27). The rate of PTSD among MST victims is twice the rate in military women who have not experienced MST (26). Because the experience of PTSD is different for men and women, it was likely that experiences with the IDES would also differ. This finding would also have policy implications. The partner VSO also pre-identified gender in the participants and loaded it into in my database before the survey was distributed.

I was also interested in duty status (active duty vs. guard and reserve duty) as a potential secondary modifying variable. Active duty service members receive disability retirement and evaluations at a statistically significantly higher rate compared to Guard or Reserve troops (40). Research also shows that there are inconsistencies about how the IDES is administered for Guard and Reserve components vs. active duty components (42). Previous research on the legacy system also indicated that there were differences between the experience of the disability evaluation system for Guard and Reserve service members relative to active duty service members. This research showed that Guard and Reserve components were less satisfied with the legacy system than Active Duty components (5). Findings that duty status altered the experience could also have policy implications. The partner VSO also pre-identified this variable in the participants and loaded it into my database before the survey was distributed.

The survey also collected information on potentially confounding variables so they could be considered in the analysis. They included: gender, race, military rank (officer vs. enlisted), age, years of service, education level, percent disability, military branch, marital status, perceived health status and housing status. All of these variables can impact a person's progress through the disability process. For instance, those with a higher percent disability are more severely injured and the system may be more complicated for them. The partner VSO already had information on age, years of service, military branch and rank. These data were all inputted into my database before the survey was distributed. These other measures were established utilizing the items discussed in the "survey development" section of this chapter.

Study Population

Partner VSO members were eligible if they had a medical discharge with an attempt to procure disability status after January 2012 (the IDES became fully operational in October 2011). I chose January to account for some of the transition time to the IDES. If I had chosen October, I might have caught people who were on the cusp of when the IDES was fully functional and I couldn't be sure they had gone through the IDES as opposed to the legacy system. In this way I assured that my sample was limited to veterans who experienced the IDES. The sample was a stratified random sample drawing on the membership of the partner VSO. As previously mentioned, this was the best, most feasible option for procuring a sufficiently sized sample. The partner VSO verifies the veteran status of their members and maintains an extensive email list.

Data Procurement

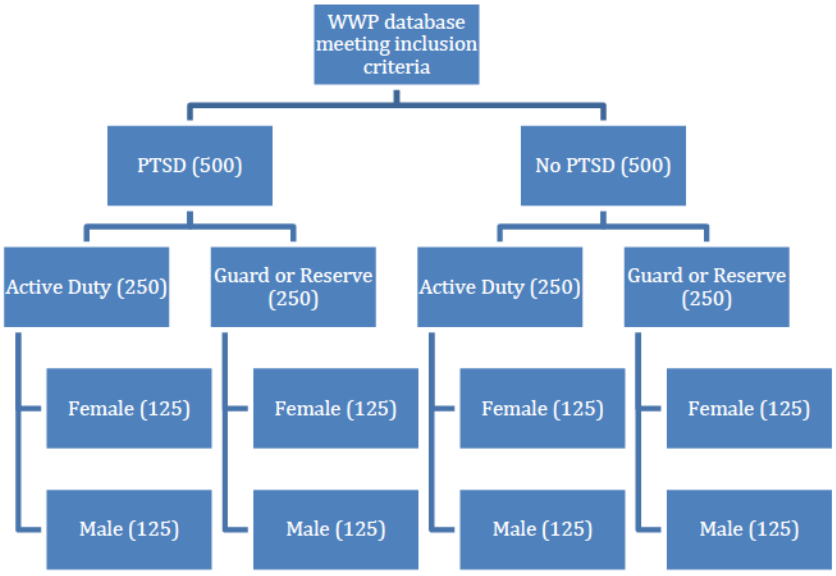
Participants received an email through the partner VSO requesting they participate in a survey to improve the IDES system. The email was sent to 1,000 potential participants and the survey was open for six weeks. The emailed was "undeliverable" to 14 people in the sample. The email contained an encrypted link to the survey, meaning only the person who was emailed the link could use it to complete the questionnaire and once they had completed the survey, that link no longer worked. The partner VSO distributed the survey. I did not have access to the names or identifying information of individuals included in the sample. Eligible participants received a weekly email reminding them to participate during the study period. Only those who had not completed the survey were contacted again. The recruitment email was sent at 10:21 AM every Wednesday morning that the survey was open. This time was chosen because the partner VSO indicated that they received the best response rate for surveys sent out in the middle of the week between 9:00AM-3:00PM.

Study Sample

The sample was stratified so that statistically significant differences could be detected for the main variable of interest: PTSD. I also sampled so statistically significant differences between genders and duty status (active vs. guard and reserve status) could be detected if I garnered a sufficient sample. The annual survey conducted by the VSO I was partnering with typically yields a 60-80% response rate. Based on this I anticipated a 60% response rate. The sample was selected with 80% power to detect a 10-15% difference between those with PTSD and those without PTSD. It was also sampled with 80% power to detect a 15-20% difference between duty status and a 20-25% difference between genders. These variables were selected because I hypothesized there would be differences between the groups based on previous research (5, 24-28, 40, 42) and because if a difference was detected, it had

implications for policy (5, 41). The partner VSO created the sample to my specifications by using their entire database and first excluding those that separated from the military prior to the advent of the IDES. All of the partner VSO's members were injured while in the military and a high proportion were medically separated. The partner VSO does not have information on whether someone medically separated in their database, so I was unable to screen for this when we built the sample. However, I screened for medical separation in the survey instrument. Next, I had the partner VSO divide the remaining group between those that had PTSD and those that did not. I then had the partner VSO divide the groups by duty status and then by gender. All of the active duty women with PTSD who separated after January of 2012 were singled out in the database and then a random number generator command was used in Excel and the list of individuals meeting this criterion were rearranged by this random number (smallest to largest). The first 125 women in this group were then selected for inclusion in my sample. This was then repeated with active duty men with PTSD, and so on, until the sample was complete. The sampling strategy was developed so that even if I did not garner enough responses to find statistical differences between genders or duty status, I would still be able to detect statistical differences between those with PTSD and those without with just a 20% response rate (I would have the ability to detect a 20% difference with 80% power). Figure 2.1 demonstrates this selection process.

Figure 2.1: Sample Selection Method



Analysis

All analyses were conducted using Stata v.12 (103). First, I conducted univariate analyses to obtain a distribution for demographic characteristics among the respondents. I compared this to the demographic characteristics of the sample. This was done to evaluate if the demographics of the sample fit expectations based on the sampling strategy and to evaluate if any demographic characteristics of the respondents differed vastly from those of the larger sample. I also conducted univariate analyses to obtain a distribution for each individual question. A full breakdown of the answers of the sample is available in Appendix G, tables 7.1-7.4.

I tested the hypothesis that those with PTSD would have a worse experience in the IDES through a bivariate analysis of the individual questions. In order to do this, I dichotomized every item in the instrument. When there were five options, I grouped the top three (positive) outcome categories together and the bottom two (negative) outcomes categories together. The reason I chose to dichotomize this way was because I was most concerned with singling out dissatisfaction so by grouping the two variables that indicated

dissatisfaction together, I was able to gain a clearer picture of this perception specifically. This was important as parts of the IDES that are known to be unsatisfactory among users are the best place to focus resources for improvement. When there were three options I grouped the top two together and compared it to the bottom option and when there were four options I dichotomized so that I compared the top two options combined compared to the bottom two options. I also dichotomized age, length of service, percent disability and each stage of the IDES by dividing the sample in half so there were roughly an equal number of participants in each group.

A chi-squared odds ratio with Fisher's exact test was then used to detect statistical difference between those that had PTSD and those that did not for each outcome variable. The survey questions can be broken down into four categories: understanding of the IDES process, satisfaction with the IDES process, length of time to complete the IDES process and current health status. These four domains are presented together in tables 5.2-5.6 on pages 92-98 of this document.

I then conducted bivariate analyses on each confounding variable to establish which variables should be considered for multivariate regression. Potential confounding variables that were considered include: gender, rank, duty status (active vs. guard and reserve duty), age, education level, percent disability, race and self perceived health status. When sufficient sample size was available I conducted chi-squared analysis on each confounding variable against each outcome variable. A table with full details of the results of this analysis is included in Appendix G, tables 7.5-7.9. The bivariate analysis revealed that there was a significant difference between ages on responses about how helpful veterans found the Case Manager. Also, those that were Guard/Reservists were significantly more likely to find the

VA claims process unfair. Those with a higher percent disability were also more likely to take more than 13 weeks to secure a disability claim. Finally, we also found that those with worse self-perceived health found the PEB process less fair and the MEB determination less fair. I then conducted logistic odds ratio regression analysis on these dependent variables with the confounding variables that were found to be significant.

I also conducted a sensitivity analysis for outcome variables with an odd number of answer choices in an item. I dichotomized the outcome variables with the top two vs. the bottom three categories for comparison or, the top two vs. the bottom one and vise versa. The differences change for both those with PTSD and those without PTSD when we change the dichotomization. This happened because for both groups, a large portion of the participants chose the middle category. Appendix G, tables 7.1-7.4 demonstrates that in every satisfaction category, at least 10% of each group for every item chose the middle option. However, the PTSD and non-PTSD groups change at roughly the same proportional rate when the dichotomization changes for most outcomes variables. For instance, when asked to respond to the question "How easy was it for you to get medical records needed for your disability evaluation as part of the PEB?" for both the PTSD and no PTSD group, 17% of the participants changed from the "agree" group to the "disagree group" (or vise versa) based on the change in the dichotomization. A table that demonstrates this sensitivity analysis is available in Appendix G, table 7.11.

While I had a small sample size, the methods employed here to analyze the results from manuscript 3 allowed me to look at potential differences of the IDES for those with PTSD vs. those without PTSD. This resulted in suggestions for policymakers, which are discussed in manuscript 3 and the discussion chapter of this dissertation.

Institutional Review Board

This study received approval from the Johns Hopkins Bloomberg School of Public Health Institutional Review Board (IRB) (Appendix H). All three study aims were deemed exempt by the IRB because no participants were ever, at any time, exposed to potential harm as a result of their participation. Additionally, no identifying information was ever collected on any of the participants. This was true for both the qualitative and the quantitative data collection conducted as part of this dissertation. I received approval for study aims 1 and 2 on July 9, 2012.

On March 20, 2015, after the survey instrument used in study aim 3 was completed, but before it was beta tested, an amendment request was made to the IRB that included the survey and requested approval. The amendment request was approved on March 27, 2015. Another amendment application was submitted, after beta testing, on May 6, 2015. I received approval for these changes on May 26, 2015. Another amendment application was submitted on May 27, 2015 because I wanted to increase the sample size from 300 to 1,000 and because the VSO I was working with wanted to add their logo to the top and bottom of the recruitment email. This was approved June 2, 2015. After the survey had been in the field for two weeks, we were concerned about the response rate and we submitted another amendment request on June 28, 2015 to extend the period the survey was in the field by two weeks. Approval for this final amendment was granted on June 30, 2015.

Manuscript 1: From Crisis to Action: A Case Study of the Military's Integrated Disability Evaluation System as an Example of Utilizing the Political System to Move Health Policy Forward

Abstract

One area of weakness in the transition out of the military for veterans with injuries and illnesses is administrative hurdles to securing a disability status and associated benefits. The Integrated Disability Evaluation System (IDES), launched system wide with congressional support in 2011, was designed to ease the transition by streamlining the process.

This case study aims to provide insight about how public health professionals can utilize the political process to influence policy decisions. This paper demonstrates three lessons from political science that will help health researchers identify predictable patterns to the congressional policy making process: (1) timing is crucial (2) the authorization process is a fruitful avenue to advance policy and (3) social construction of a target population can aid in the passage of legislation. By utilizing these lessons, health researcher can advance evidence-based policy, ultimately improving the public's health.

Introduction

The medical and emotional costs of the wars in Iraq and Afghanistan continue despite the fact that official American involvement in these countries has ended. For disabled service members, one challenge associated with transitioning back into civilian life is the process of securing a disability classification and associated benefits (5, 104). The Integrated Disability Evaluation System (IDES), designed to streamline the transition process, was launched in 2007 as a pilot program and system-wide in 2011. With the IDES the military sought to

shorten the time and improve the accuracy of disability claim adjudication, ensure appropriate access to care, and increase satisfaction among user(5, 104).

Prior to the IDES, service members were evaluated twice for disability: first by the military, and then by the Veterans Administration (VA) after separating from the military. Often the disability scores would differ with little explanation. Veterans found the process confusing and onerous, and satisfaction was low(5). The IDES eliminated the dual evaluation process: a service member now receives one rating based on an examination by a VA doctor prior to leaving the military.

The move to the IDES was noteworthy because the Department of Defense (DoD), the Department of Veterans Affairs (VA), Congress, and veteran's service organizations (VSO's) all collaborated to make the change. While the American political system is generally regarded as gridlocked, convoluted and needlessly bureaucratic, IDES is an example of a health policy that succeeded, despite these systemic challenges and as such is an instructive case. The goal of this paper is to provide insight into how health researchers can use the political process to inform policy, using IDES as an example. We draw on the political science literature to provide a conceptual foundation for understanding the political process. In the context of this paper we define this process as how legislation navigates congressional politics to become law.

Bernier and Clavier advocate that public health professionals should use findings from political science to engage in the policymaking process because it can lead to more thoughtful, policy-relevant research (61). Deborah Stone argues that good research alone does not lead to lead to new or perfect policy: politics is an essential part of the policy-making process (59). Political science can provide insight into why politicians support certain

policies, and help health researchers use evidence to move policy ideas from research to reality. Oliver argues that a better understanding of the political system will help researchers produce more politically feasible studies (62). Despite the potential application of political science to apply research findings to policy decisions, the public health literature contains few examples of this (61, 63, 64). One law review article, by Rutkow *et al.* reviewed vaccination policy and the political factors that contributed to changes in that area(65). Barry *et al.* examined the political factors that led to changes in mental health parity laws (66). This paper adds to these contributions with a case study that draws on lessons from the political science literature to understand how and why the IDES was realized.

Lessons from Political Science

We've identified three lessons from political science that help to explain the political system as a viable route to changing health policy: 1) timing is important (67); 2) the social perceptions of the group targeted for assistance can aid or hinder legislative success(4); and 3) reauthorization legislation is an important vehicle for accomplishing change(68).

The application on these lessons will be discussed as it applied to IDES in the discussion section however, we will briefly introduce them here. John Kingdon teaches us that timing is important through what he calls a "window of opportunity. " Recognizing and taking advantage of points in time when a policy window is open can make the difference between realizing a new law, regulation, or policy and failing in that effort (67). Kingdon, as well as other political scientists (69) describe crisis events as one way that policy windows open and decision makers are more open to policy ideas and related research. Kingdon also described scheduled events, such as an annual budget bill, as a time

that a window might open.

Authorizing legislation is on a scheduled timeline and is often tied to the operation of a federal agency. Congress considers the National Defense Authorization Act (NDAA) annually; its passage is needed for the Department of Defense to function. Political scientists have also demonstrated that authorizing legislation presents an opportunity for new policy proposals. The prominence of authorizing legislation is illustrated. One study attributed nearly two thirds of votes on the House floor to reauthorization legislation(68). But isn't just recognizing timing, it is also knowing how to utilize the authorization process specifically. Because authorizing legislation is something that "must pass," in an era of increased partisan polarization "policy-making attention" may increasingly shift to "recurring and necessary temporary legislation" such as authorization legislation (68). From a practical standpoint, if a new policy is even tangentially related to an authorization bill, legislators would be well served to position that bill as part of a larger authorization. Recognizing good timing, and identifying a potential authorization bills as vehicles, however are not sufficient to pass legislation.

The role of stakeholders associated with a policy proposal, how they are viewed, and their level of influence over policy makers is a central explanatory factor in Schneider and Ingram's work. Social groups, such as veterans and military personnel, are either positively or negatively socially constructed by "politics, culture, socialization, history, the media, literature, religion and the like"(4). They postulate that political power is derived from this social construction in concert with other factors such as money and reputation within Washington, DC. Veterans and the military fall into the "advantaged" group according to Schneider and Ingram because they have power in the form of a well-established interest

group and they are positively socially constructed. This means that politicians are going to be inclined to pass legislation that supports these groups (4). Schneider and Ingram identify three other groups in addition to the "advantaged" group: contenders (negatively constructed but powerful), dependents (positively constructed but weak), and deviants (negatively constructed and weak) (11). These three groups are less likely to be associated with successful policy proposals because of their social construction.

The evidence presented in this study demonstrates how these lessons from the political science literature can be useful for health researchers seeking to use the political system to improve health policy. The IDES case study presented herein accomplishes this by 1) documenting the legislative actions taken to accomplished the IDES; 2) applying lessons from political science to understand why the IDES received support; and 3) explaining how these lessons inform future health policy initiatives. As such, it will provide health researchers context for engaging the political system to advance health policy.

Study Data and Methods:

We selected a case study approach (81) because it allows for in-depth exploration of a successful legislative effort and for the application of lessons from political science. We used congressional documents, media reports, and semi-structured interviews to recount the events leading to the development, passage, and implementation of the IDES.

Document Review

Our document review began with a thorough reading of the Presidential Commission on Care for America's Returning Wounded Warriors report released in July 2007 (5). Commonly referred to as the Dole-Shalala report, after its two chairs, the report includes an overview of the major events that shaped veterans' disability laws and

regulations prior to 2007, and recommends changes in disability assignment, some of which the IDES realized (2).

We developed a set of key words to identify congressional documents related to the development and passage of veterans' disability policy in general, and the IDES in particular. Search terms included: "wounded warrior"; "disability AND veteran"; "Dole-Shalala" and "Walter Reed". We then searched ProQuest Congressional, an on-line database of congressional records (83).

We began the search in January 2007 because it included the one-month period before a *Washington Post* story detailed the "bleak" (9) conditions at the Walter Reed Army hospital. The article described service members languishing in a health care system ill-equipped to respond to their needs (9). The *Post* coverage captured the attention of policymakers and the public, and is widely regarded as the impetus behind the Dole-Shalala Commission (5).

We used an iterative process to guide the document search. The final set of terms included: "Integrated Disability Evaluation System"; "Walter Reed AND Building 18"; "Walter Reed AND Condition"; "Walter Reed AND Deplorable"; and "Dole-Shalala". We determined, based on the title, short description of the document and a key word search of the document, if it included content about the development and passage of the IDES.

We then used the results to search Committee websites and VSO websites for additional material. The ProQuest search returned hearing information, but the records were not always complete. The Committee and VSO websites supplemented information available in ProQuest. We also searched the Government Accountability Office (GAO)

website, as GAO representatives evaluated the IDES pilot and testified before Congress about their findings (54). Based the identified documents, we developed a timeline of key events in the history of the IDES.

Media Search

Kingdon describes the media as an important factor in understanding the timing of legislative attention to an issue, and as such it was vital to understand the media's role in the IDES. Media can also help to inform how the sequence of events surrounding the IDES occurred, as congressional testimony alone does not provide a complete picture. We used LexisNexis(88) to conduct to conduct a media search, and included specific national print media (*New York Times, Washington Post*) and wire services (Associated Press Newswire, McClatchy-Tribune News Service), as well as periodicals written specifically for those who work in politics (*Newstex Congressional, Politico,* and *The Hill Newspaper*). We selected these sources based on media studies reported in the literature (65) and the lead author's experience as a legislative staff member.

The search spanned from January 2007 through June 2014 and used the same terms from the congressional records search. We scanned the article titles for relevant content (Walter Reed, veterans disability or transition of military personnel included in the title), eliminating duplicate articles. We read this subset of articles to ensure they were relevant, eliminating those that were not, assembled the results in chronological order, and integrated key events into the document timeline.

Semi-Structured Interviews

We identified key informants by selecting committees relevant to legislative action on the IDES. Members and their staff who served on the identified committees when

Congress was considering issues related to the IDES (2007-present) were eligible for inclusion: House and Senate Armed Services Committees (HASC and SASC); House and Senate Veterans Affairs Committees (HVAC and SVAC); and House and Senate Appropriations Committees. We combined this purposeful sampling approach with snowball sampling (79) so that our final sample included informants identified through their positions (purposeful) as well as through the networks of those involved with the IDES policymaking (snowball). Interviewees were first contacted by email and interviews were arranged via email. For those included in the snowball sample, the research team received an email introduction via another participant in the study and then arrangements for interviews were made also by email. We conducted interviews until we reached data saturation (81).

The interview guide was based on the political science literature and the findings from the document and media review. For the purposes of this analysis, interview data were used to address gaps within the legislative history. For example, insight into strategic decisions aimed at gaining support for the IDES pilot and identifying the pivotal stakeholders in advancing the IDES behind the scenes, were areas of the legislative history informed by interview data.

Results:

We used the data to construct a timeline of events leading to the development of IDES and subsequent congressional support (Figure 3.1). These events fall into three major categories: Walter Reed scandal; committees and commissions; and creation and implementation of the IDES. Importantly, while Congress authorized and funded the IDES pilot, and continues to oversee the IDES, there was never a bill that specifically legislated the IDES system-wide. That decision was made under agency authority.

We conducted 26 interviews with congressional staff from the aforementioned committees. The purposeful sampling approach yielded 5 participants, including both Democrats and Republicans; snowball sampling (79) identified 21 additional participants. There were 28 people asked to participate and two individuals refused. Interviews lasted between 30 and 90 minutes. We met with 5 of the interviewees prior to the interview to discuss the project and their willingness to participate. For two other interviewees, we spoke via phone prior to the interview, also to discuss the project and their potential participation. For the remaining participants, we had a conversation about the project prior to beginning the interview and the interview was conducted in the same meeting. One participant was interviewed twice. All interviews were in person. Three of the interviews included two participants. The remaining interviews were conducted with just one participant and the researcher. All interviews were digitally recorded and transcribed by a third party transcription service. A member of the research team checked the transcriptions for accuracy. We concluded we had reached data saturation (additional interviews would not likely yield substantive new information to address research questions)(105). Three recommended interviewees worked at organizations that support the military and were known experts on the IDES. Although these participants were not Members or staffers, informants recognized their perspectives as relevant to the study aims.

The Walter Reed Scandal

On February 18, 2007, the *Washington Post* published the first of a series of articles detailing "bleak" and "neglected" conditions at Walter Reed Army Medical Center. Soldiers profiled in the article had languished in the disability evaluation and health care systems far longer than seemed necessary; all had been there for more than a year navigating, as they

explained, lost paperwork and lack of information. On average, soldiers were expected to file 22 different forms with 8 different commands just to enter and exit the medical processing system. One soldier, who completed three tours, described bringing in letters and pictures of her in Iraq to prove she had been there. While problems at the facility were known to Members of Congress before these articles (HVAC held hearings on issues at Walter Reed as far back as 2005) this was the first time the extent of the problems were revealed so publically, according to interview data.

Interview data lend significant meaning to the events at Walter Reed and the *Post's* coverage, and demonstrate the special place of veterans as, in the words of one participant "a sacred cow" in America's political landscape. Interviewees described the Walter Reed incident as vital to moving the IDES forward. It was "the event that turned a lot of the public eye" toward the issue of veterans' transition from DoD to the VA. Most interviewees, when asked about the impetus behind the IDES, began by discussing Walter Reed. One interviewee began, "I got a call Friday night that there was going to be a story in the *Washington Post* about building 18 at Walter Reed… It really just flowed from there." It "made it front page news for Americans generally but also for Members of Congress."

While the Walter Reed scandal was a vitally important catalyst, interviewees suggested that the larger problem with health care and the transition from active duty to veteran status likely would have come to light without the *Post's* coverage. The issue was on the radar of Congress, the Administration, and other stakeholders. Efforts to address these known shortcomings were underway on a small scale; one interviewee noted that a system similar to the IDES was already being tested at one Army installation.

After the *Post* story, Congress, President Bush and the Secretary of Defense, Robert Gates, responded. Members of Congress expressed their anger on the House and Senate floors. The American public was also outraged: a Pew Research Center poll conducted in March 2007 found that 30 percent of Americans were closely following the reports about Walter Reed. The only issue followed more closely was news about the war in Iraq (106). Secretary Gates set up an independent review group. Two weeks after the *Washington Post* story, the Secretary of the Army and the commander in charge of Walter Reed were both dismissed (107).

In March the first of three Committee hearings on Walter Reed in the Subcommittee on Military Personnel in HASC was held. The hearing, which took place at Walter Reed, provided members with an overview of DoD's disability system and perspectives on the status of Army and DoD services for injured soldiers. Members of Congress pointed the finger at General Kiley, who was in charge of Army medical facilities (108).

The following month, the House and Senate passed an emergency supplemental to the 2007 appropriations bill entitled, "U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act" (P.L. 110-28). It appropriated $1.9 billion exclusively for veterans' health care and VA infrastructure (52).

A month later the Subcommittee on Military Personnel in HASC, held a second hearing on the issue where members of Secretary Gates' Independent Review Group testified about their findings. They described the problems at Walter Reed as a "perfect storm" where increased casualties, problems with military contracts, and the imminent closure of Walter Reed as a result of the base realignment and closure plans led to a hospital ill equipped to

handle transitioning soldiers transitioning. They recommended changes to the caseworker structure and shortages of primary care physicians and nurses (52).

In July 2007, Congress passed the "Wounded Warrior Act" (P.L. 110-389), which included provisions to evaluate and alter the disability system, and addressed several aspects of veteran's health (52). The most significant of these with regard to IDES authorized funding for evaluation and adjustment of "the transition of service members from the Department of Defense to the Department of Veterans Affairs"(52). Interviewees explained the reason Congress addressed veterans' health as a stand-alone bill, as opposed to including provisions in a larger authorizing bill, was because it allowed HASC and SASC to address issues in response to the Walter Reed Scandal immediately. A more detailed response to the Walter Reed coverage was included in the NDAA for fiscal year 2008.

One year after the *Washington Post* story, the Committee on Oversight and Government Reform held a follow-up hearing to its first Walter Reed hearing. Chairman John Tierney expressed hope that the time had come to change the disability system, which has been flawed for "decades," saying that this was a "unique opportunity" He urged Members to not let it slip through their fingers (109). Independent Evaluator from the GAO, Daniel Bertoni, also testified about the IDES pilot during this hearing and emphasized the need for a better-integrated system, while also pointing out problems with heavy workloads for physicians, lawyers, and disability assistance staff (109).

Committees and Commissions Charged with Recommendations for Change

There were several commissions following the Walter Reed Scandal. The most high profile of these was the Dole-Shalala Commission. President Bush established this Commission two days after the first Congressional hearing in March (5). It was tasked with

investigating the current state of support for transitioning service members. It conducted a survey of 1,700 injured service members and conducted site visits to 24 military and veteran medical facilities. Health researchers were involved in the execution of these activities and helped to craft the Commission's recommendations presented in the 2007 report "Serve, Support, Simplify: Report of the President's Commission on Care for America's Returning Wounded Warriors" (5).

The Dole-Shalala commission presented its preliminary results in June 2007. It included three sub-reports: "a system that serves, a system that supports, and a simpler system" — and offered recommendations in each section (5). The recommendations in the "simpler system" section called for administrative changes to ease the transition, one of which would eventually become integrated into the IDES (110).

While the Dole-Shalala Commission received the most attention from the media and was referenced as where the idea for an integrated system originated, the Wounded, Ill and Injured Senior Oversight Committee (SOC), arguably contributed more directly to establishing the IDES. Convened in May 2007, it implemented the 2008 NDAA requirement that the VA and the DoD "jointly develop and implement comprehensive policies on the care, management, and transition of recovering service members." As part of this, it was charged with developing policies, including disability evaluation policies, which eased transition out of the military. According to interview data, members of the SOC approached staff on SASC and HASC and made the recommendation that DoD and VA move to an integrated system. Interview participants indicated congressional committee staff believed additional research was needed to justify this change.

In response, the 2008 NDAA (P.L. 110-181) also commissioned another report aimed at producing evidence to guide changes to disability evaluation. A subgroup of the SOC, the Overarching Integrated Product team, conducted a study with over 40 disability evaluation experts from the DoD and VA. Together they used the medical records from 33 previously adjudicated cases to test five proposed systems. These cases included soldiers from all military branches with a diversity of injury and illness presentations (110). The resulting report aligned with the Dole-Shalala recommendation to eliminate one of the medical exams (110), resulting in the system that would become IDES.

Interview data indicate that the decision to cite the Dole-Shalala report in this study was political; it was helpful to show that more than one study had reached the same conclusion. The people in charge of this study had also worked closely with those conducting research for the Dole-Shalala report. The recommendation however went one step further than just elimination of one exam: it ceded all responsibility for disability evaluation to the VA. Interview participants involved in this decision described this as a source of conflict between the agencies since the 1990s but after Walter Reed the DoD decided it wasn't "worth fighting anymore."

The IDES

Nine months after the *Washington Post's* Walter Reed coverage the IDES pilot program launched with the goal of "evaluating and significantly improving the timeliness, effectiveness, simplicity, and resource utilization by integrating DoD and VA processes, eliminating duplication, and improving case management practices" (110). Congress authorized the pilot through the 2008 NDAA (P.L. 110-181, § 1644), as directed by the Wounded Warrior Act (111) and funded through the Defense Appropriations Act for Fiscal

Year 2008 (P.L. 110-181, § 1644) (112). Interviewees involved with the appropriations process explained that funding levels were included in the President's budget request to Congress, as is standard for disability payments and evaluations to be determined by the Administration and then Congress then meets that request. The pilot authority was not limited specifically to the IDES. The military piloted the new system at 13 sites, including Walter Reed.

One explanation for the IDES support provided by all interviewees was the legislative vehicle (the NDAA) chosen by the coalition of stakeholders advocating for changes to the disability system. This included individuals within the military, staff members of the VA and Defense Committees and VA staff. Including pilot authority in the NDAA almost guaranteed its success: it "is a very well known strategy to attach something to the NDAA" to get it passed. Even in a tough budget climate, an NDAA typically passes "because no one wants to be seen as not funding the troops." With regard to the IDES specifically, the pilot authority was included in the NDAA "because…a large part of this is DoD and so it's the appropriate vehicle to establish policies related to personnel matters. Also we…know this is a vehicle that's going to move every year."

The 2010 NDAA authorized funding for a "Department of Defense Task Force on the Care, Management, and Transition of Recovering Wounded, Ill, and Injured Members of the Armed Forces" (P.L. 111-84) (113) to evaluate the IDES pilot.

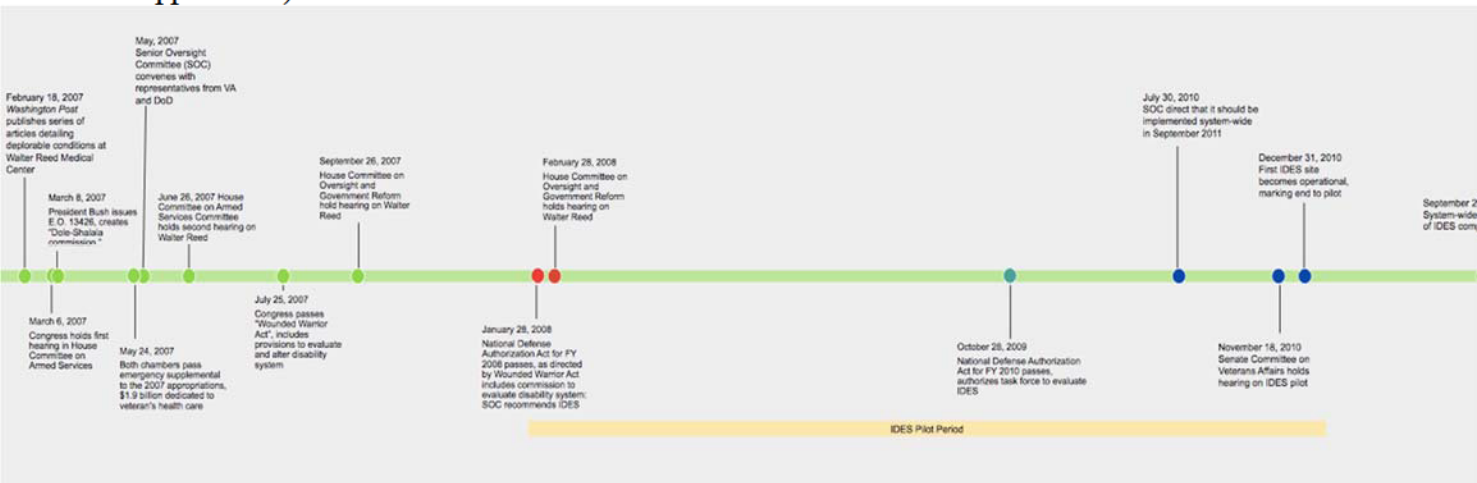
In the summer of 2010, the Administration announced that system-wide implementation would begin in October 2010 and be completed by September 2011 (114). In November SVAC held a hearing to discuss the evaluation of the IDES. Daniel Bertoni testified again and shared GAO analyses indicating initial improvements over the "legacy

system" that pre-dated the move to the IDES. Waiting times for active duty averaged 295 days compared to 540 days under the legacy system. Satisfaction also appeared to increase under the IDES (54).

The study also identified weaknesses in the IDES. Staff shortages presented a challenge to system-wide implementation, and patients with mental illness experienced additional delays. Both DoD and VA noted the need for guidance in establishing criteria to rate mental illness as related to service (54).

IDES is an executive level policy that reflected existing authority within the agency to change. However, it required support and funding from Congress to be realized.

Figure 3.1. Timeline of Events Surrounding the IDES (larger version available in Appendix B)



Discussion

As discussed in the introduction, the goal of this paper is to apply lessons from political science to the IDES case study in an effort to demonstrate how to use the political system to advance the public's health. It is clear from this case that timing was important to advancing policy in Congress. As discussed, the disability system had been problematic for a long time. Despite this problem, prior to the Walter Reed scandal, timing was not right to

make a change. The Walter Reed Scandal catalyzed the need for a solution to this problem. It created political will to advance policy that addressed problems with the transition from DoD to VA. The data indicate that the Walter Reed scandal set the legislative ball rolling with regard to the IDES. It was mentioned as vitally important in every interview. Articles about the veteran's benefits backlog cite the Walter Reed event as many as 7 years after the *Washington Post* story. The American public also became interested in the issue as indicated by the Pew Research Center poll. Prior to the *Washington Post* story individuals involved with the system knew that there were problems but there was no political will to change the process. The interview data indicate that those who were aware of the problems with the disability system capitalized on the good timing created by the crisis created by *Washington Post's* coverage of the problems at Walter Reed to advance policy.

However, it was not just the timing of the crisis. The window, which was cracked by the *Post* story, was flung open by the opportunity of the NDAA. As Adler and Wilkerson point out, the majority of legislative attention is focused on passing authorizing legislation. Attaching language to an authorization bill, such as the NDAA, is a reliable way to change policy. In the case of IDES, interview data show that those familiar with congressional processes recognized the opportunity of this "must pass legislation" and chose to attach the pilot authority for IDES to it and thus ensure its passage. The NDAA was a moving legislative vehicle tangentially related to veterans, and those attempting to change the disability system knew reform via the NDAA had a much higher chance of success than a stand-alone bill from the Veterans Affairs Committee.

But good timing alone, and an appropriate legislative vehicle, is not sufficient to pass legislation. One reason the policy window opened following the *Post's* coverage of Walter

Reed, and the reason it was possible to get the IDES attached to the NDAA is because of the way veterans are socially constructed. Veterans fall into the "advantaged" group described by Schneider and Ingram (4). This position was vital to the speedy passage of legislation to address veterans' needs following the Walter Reed scandal. Politicians did not want to be perceived as ignoring the problems of this "advantaged" group. Not responding to the public exposé would have negatively impacted public perception of elected officials, as evidenced by Congressional records and media reports (4). Rhetoric used to discuss veterans by politicians in both congressional records and media reports is all positive. Following the Walter Reed scandal there was a rush by politicians to hold hearings about veterans issues. The interview data also support this positive construction. The role of veterans as a "sacred cow" is understood in the context of Schneider and Ingram's work.

By understanding this case in the context of the political science literature, health researchers can gain tools that will help them better navigate political processes and better integrate research into policy decisions.

Research about how Congress makes health policy is also a fruitful avenue for further research. Health researchers are focused on outcomes, while political scientists are focused on the processes and systems. By better understanding how the political processes described by political scientists impacts resulting policy, health researchers will be better equipped in the future to impact change.

Conclusion:

The IDES case demonstrates that the political process has predicable patterns that health researchers can use to advance the public's health. First, recognizing good timing is

vital. Public health researchers must be prepared with policy solutions to problems in order to take advantage of windows of opportunity that increase the likelihood of success. Second, public health researchers should understand the authorization process, and use it to their advantage. Third, public health researchers should capitalize on "advantaged" social construction when possible. If a group does not fall into an advantaged category, health researchers should work with interest groups to improve the social construction of the group they seek to assist. Finally, further research in the area of congressional policy making and how it can be utilized to advance health policy is needed.

Manuscript 2: Engaging Policymakers in the Research Process: A Case Study Employing Community-Based Participatory Research Principles

Abstract

Background: Policymakers and researchers rarely collaborate on the execution of research, despite relying on each other's work. Bridging this gap can be beneficial to both parties. Community-based participatory research theorizes that more just and effective research results from involving the community of interest throughout the research process (development, delivery and evaluation). In this study, policymakers are considered the community. Through a case study of the military's Integrated Disability Evaluation System (IDES), we examine the feasibility of engaging policymakers in the formation of research questions and conducting resulting research.

Methods: We used a case study design and conducted 26 in-depth interviews with legislators, their staffs and representatives from the Veterans Administration, Military and Veteran Service Organizations. We selected key informants through purposeful sampling and used snowball sampling to identify additional informants. We coded the data at three levels and reassembled the coded data according to themes.

Results: Policymakers were amenable to participation in this study and indicated they would like to be involved in future academic research. They also indicated a need for policy relevant academic research, in part because academia is viewed as "credible" and trustworthy, unlike other sources of information. Policymakers were also provided concrete recommendations for a survey to evaluate the IDES.

Conclusion: While researchers must be wary of tension between political parties and between legislators and administrative agencies, there is an opportunity to involve

policymakers in the research process. Engaging in this type of relationship potentially increases the likelihood that research will inform policy.

Introduction

Research can identify specific problem areas and provide information to help policymakers craft effective policy. Despite the potential for research to inform policy, the political science literature demonstrates that in our current polarized political environment, politics can stand in the way of research being translated into policy (59). Therefore, the political process is a factor that must be considered when translating evidence-based research into policy (115). This study presents an avenue to assist researchers with navigating that process.

While there is a well-documented need to understand the political process in order to translate research findings into policy (61, 62), guidance from the public health literature about how best to work with policymakers to advance research is limited (70). Simmons et al. demonstrate the need to consider political context when translating public health research into policy (116). Sorian et al. and Colby et al. both found that, when approaching policymakers who have limited time and receive large volumes of information about health research, it is more effective to communicate research findings concisely, and in the context of current debates (73, 74). Importantly, policymakers cite professional organizations as their most trusted sources of information for understanding the peer reviewed literature, (73) which is consistent with the literature demonstrating that personal contact with policymakers can be important to translating research into policy (75).

Here we present a framework for researchers to facilitate that personal contact with policymakers and become a trusted information source for using research to inform policy decisions. This approach builds on the existing body of research by presenting a framework developed from our case study of the U.S. military's new Integrated Disability Evaluation System (IDES). As part of this case study, we used Community-Based Participatory Research (CBPR) principles (80), with federal policymakers as the community of interest. To our knowledge, this is the first application of CBPR to a policy setting.

Community-Based Participatory Research

CBPR offers a new approach for transferring information between researchers and practitioners in the policy community. According to CBPR principles, more just and effective interventions result from including community participants in all stages of the research process including development, delivery, and evaluation. Those who practice CBPR reason that if a community is involved in research, its members have a vested interest in the intervention and will be more engaged in assuring its success. In addition, researchers benefit from the "ground truth" that can come with community input into the development of research questions and the resulting interventions, as such input is more likely to yield a greater impact (78).

While this approach has traditionally been applied in public health to address health disparities in marginalized communities (117), we view it as a useful approach for engaging policymakers in the research process, increasing the relevance of research to the policy process, and strengthening relationships between researchers and policymakers. By treating policymakers as the community of interest and involving them in the research process, they can communicate with researchers about research questions of interest to

them. As a result of this process, policymakers should be more inclined to draw from the resulting research when making policy decisions.

Israel et al. outlined nine principles to guide researchers engaging in CBPR; we see seven of these as applicable to federal policymaking. These seven principles are: (1) recognize the community as a unit of identity; (2) build on the "strengths and resources of the community"; (3) facilitate collaborative relationships during all phases of the research; (4) promote co-learning among partners; (5) develop system through a cyclical and iterative process; (6) disseminate findings to all involved partners and involve partners in the dissemination process, and (7) make a long-term commitment to the research process(77). We hypothesize that by applying a CBPR approach to policy research, policymakers and researchers will be better able to work together to identify policy research priorities, produce research that is responsive to policy needs, and apply those findings to policy decisions.

Integrated Disability Evaluation System

In order to determine whether CBPR can be effectively applied to congressional policymaking, we conducted a case study of the IDES. The IDES launched, with congressional support, in 2007 to address longstanding problems with soldiers' transition out of the military and the disability evaluation process involved in that transition. The pre-IDES legacy system was widely recognized as a source of frustration and confusion among soldiers and administrators, and cited as a reason for poor access to resources and medical care (5). Before the IDES, service members were evaluated twice for disability: once by the Department of Defense (DoD) and then again by the Veterans Administration (VA). These two ratings often differed, causing confusion among service members. The IDES is designed

to streamline the transition process, shorten the time to claim adjudication, and increase satisfaction and understanding among users (5, 10). Under the IDES, service members receive one disability rating from the VA.

While the IDES holds promise for improving the transition out of the military and into the VA, there are challenges. The Government Accountability Office (GAO) concluded that the evaluation process continues to be slow and confusing (11). The Recovering Warriors Task Force, charged with overseeing the IDES (118), determined that it was "a lengthy and mystifying ordeal" and made recommendations to overhaul the entire system (3).

Clearly changes need to be made to the IDES, something policymakers are aware of and eager to address, particularly because veterans are generally regarded as a politically important stakeholder group by policymakers (4). The interest in realizing an effective system and the high priority inherent in this issue make the IDES an ideal case to test CBPR principles with congressional policymakers. By applying CBPR principles to the IDES case, we aim to inform changes to the IDES with evidence-based research, and provide a model for better integrating research into congressional health policy formulation.

Application of CBPR Principles to IDES case study

To test this theory, and to understand the legislative process involved with realizing the IDES (116) we conducted a series of in-depth interviews with congressional staff engaged in veterans' health policy and the IDES. We asked interviewees about their interest in research to inform their policy decisions and invited them to comment on a survey we were developing to evaluate the IDES. As part of this study we drew on foundational CBPR literature to develop the following research questions (77):

(1) How can policymakers be effectively engaged in the formative stages of research?

(2) How do congressional policymakers consider research in the context of policy decisions?

(3) What kind of input into the research process do policymakers provide when invited to participate?

(4) What value do policymakers add to the research process?

(5) How does a researcher utilizing a CBPR framework impact the policymaking process?

The findings presented herein inform whether and how CBPR can be used in a legislative setting to promote the use of research in policy decision-making.

Methods

To answer the aforementioned research questions, we conducted a series of in-depth, semi-structured interviews using an interview guide developed by the research team (Appendix C). The lead author conducted all interviews between November 15, 2013 and September 30, 2014.

Sample

We identified U. S. Congressional committees relevant to legislative action on IDES: House and Senate Armed Services Committees (HASC and SASC); House and Senate Veterans Affairs Committees (HVAC and SVAC); House and Senate Appropriations Committees. Members and staff serving on the identified committees when Congress was considering the IDES policy (2007-2014) were eligible to be interviewed. Within these committees, we chose individuals who had worked on the IDES and/or worked on subcommittees responsible for the IDES. We combined this purposeful sampling approach with snowball sampling (79), meaning we asked interviewees to identify additional individuals for inclusion. Our final sample included informants identified through their positions and reputation (purposeful) as well as through the networks of those involved with the IDES policymaking (snowball). We continued to sample interviewees until data

collection from our purposefully identified interviewees was complete and we reached data saturation (81).

Based on the principle that qualitative research should include "rival views," (81) we interviewed Democratic and Republican staff from the House and Senate. This was particularly important because veterans' issues became more politically sensitive during the eleven months we were conducting interviews due to media attention focused on problems with a VA hospital (92).

Interview Guide

The interview guide included questions about the IDES and CBPR generally. Due to the iterative nature of qualitative research, the interview guide evolved over the course of data collection to include information gleaned from previous interviews (81). For example, we added questions about participants' views on academia (as opposed to research generally) because the original interview guide did not yield responses about participants' views about engaging in research with academics generally. Rather participants were focused only on research about the IDES. Questions encompassed 3 domains: 1) background information on the interviewee and how they were involved with IDES; 2) views on IDES and its future; and 3) the role of researchers in policymaking. The final interview guide is included in Appendix C.

Data Management

We digitally recorded (with interviewees' permission) all interviews and they were transcribed using a transcription service. We checked a subset of transcripts for accuracy and corrected as needed.

Analysis

We analyzed the data using an iterative process. We coded these data at two levels using NVivo10 (94), beginning with open coding (81). Open coding is a process of developing codes to capture recurring information of relevance to the research topic and codes are closely related to original source data (81). We conducted open coding after each interview to identify new information that required interview guide modifications. After completing data collection and open coding, we conducted categorical coding. When conducting categorical coding, which is a higher conceptual level of coding, we took into account similarities across codes (81). We did this coding in an iterative fashion and a codebook was developed. Codes were both deductive and inductive, meaning some codes were based on interview guide questions and some emerged directly from the data.

We then arranged codes hierarchically (81) by creating a table with all open codes placed into one or more categorical codes. Within the categorical codes, we grouped those that were conceptually similar until themes were identified. We then reassembled data according to these themes, as reflected in the following section.

Results

Purposeful sampling yielded 5 interviewees; snowball sampling identified 24 more. We invited all 29 individuals to participate and two refused (one stated it was against office policy to participate in research projects; one never responded to interview requests). We conducted twenty-four interviews with 27 individuals. Interviews lasted 30-90 minutes. At interviewees' request, for 7 individuals we met prior to the interviews to discuss the project and their willingness to participate. We conducted all interviews in person at locations convenient for the interviewees. Three interviews included two participants.

Relevant demographic information on interviewees is presented in table 4.1. For committee staff, we interviewed individuals on the subcommittee responsible for issues related to IDES. Three interviewees worked at non-governmental organizations that support the military and were known IDES experts who other interviewees recognized as relevant to the study.

We engaged in email exchanges with every interviewee prior to each interview. These exchanges included discussion about logistics of the interviews (e.g. when and where we would meet), the project and any questions about participating. Pre-interview conversations served to build trust. Trust developed more readily when someone within the community referred us to the participant.

Table 4.1. Demographic information about interviewees

Characteristic	**Number**
Political Affiliation	
Republican	6
Democrat	18
Unknown	3
Place of Employment	
Personal Office of a Member of Congress	13
Committee Office	11
Organizations that support military/veterans	3
Chamber of Congress	
House	16
Senate	8
Former or Current Member of the Military	
Yes	15
No	12
Total	27

Policymakers' willingness to participate in research

In general, policymakers were amenable to participating in this project as evidenced by their willingness to be included in the study and by the depth of their responses. Most of those identified through the sampling process (29 of 27) participated,

and those interviewed readily provided input. Furthermore, it was the experience of one member of our research team (MMS) who had worked on Capitol Hill that congressional meetings generally are limited to a half hour but almost every interview lasted an hour or more. Interviewees also made it clear that they were willing to talk again, and one participant was interviewed twice as a result. And, they often recommended additional participants, which proved useful in building a robust sample.

As demonstrated in the following sections, participants provided thoughtful answers based on their own experiences. They often provided specific examples to demonstrate the point they were making. Overwhelmingly, they stated that they welcomed working with a research team and indicated that they would like more access to researchers, as demonstrated in the following section.

Additionally, participants were interested in the resulting research: almost every interviewee asked to see the report on the survey that their input would inform.

Role of the Researcher

Interviewees generally described research and academia using words such as "credible". "Credible" was used, unprompted, by 5 of the 17 participants who were asked about their views on academia. Furthermore, academia and university-based research were generally viewed as neutral as opposed to other research, such as that presented by agency researchers and non-governmental organizations, which interviewees described as more biased than academia. As one interviewee stated, "They're [academics] trying to find the truth. And no matter what that is… it comes from good, solid analysis." Specifically, two participants discussed Veteran's Service Organizations (VSOs) and VA and DoD as having "a bias," intended to bolster the agency/organization, or its

membership, unlike academic researchers. Despite this bias, interviewees indicated these organizations are an important voice in the veterans' policymaking community and vital politically.

Interviewees also indicated that they would welcome further participation from academia in policymaking but they do not currently involve researchers unless an established relationship exists. Six of the interviewees who were asked about academia stated that strong relationships with research institutions were beneficial to their policy work and the resulting products. One participant specifically stated that having scientifically conducted surveys and focus groups to support a position is "huge." Interestingly, there did not appear to be a partisan divide. Both parties seemed to welcome input from academia.

However, aside from existing relationships, they indicated that they had not thought to include academics unknown to them in their work or that they would not know how to reach out and begin new relationships. As one participant stated, "I would love to have more stuff from universities, from some of the different centers but it's just harder for us to find and access and know what's credible." Three participants discussed the need for academics to "outreach" to congressional staff if they wanted their research to be considered in policymaking. As one interviewee stated for this type of outreach to have "influence," "[the researcher] is long-term following the issue and understands the context and how it developed." He continued, then "I think their views are much more meaningful."

Participants also expressed concern about the speed of academia. Participants indicated that often they need information quickly and they would not have time to wait

for a study to be conducted. Interviewees also discussed the concern that if they need research and they were to reach out to academics, the time it would take to get results is longer than a policymaker has to make a decision.

Contributions to Research Questions

While we were interested in the interviewee's perceptions of academia, we were also trying to discern if policymakers could make concrete recommendations to researchers for conducting a study on the experience of the IDES. When we described to interviewees our plans to survey veterans about their experience with the IDES and asked them to identify additional goals and questions for our survey, all responded. Some had concrete recommendations. For instance, one interviewee responded with several direct questions including, "Do they feel like information [about the disability evaluation] is given to them" at every stage of the process? Other participants gave more general answers such as, "regular reporting on satisfactions and outcomes generally." When probed, most of these participants gave a more concrete response. For example, when probed about "regular reporting on satisfaction and outcomes," the interviewee stated that she would like to know more about what, and how veterans who had completed IDES were doing now.

The responses resulted in three issues we had not previously considered for the survey: 1) the involvement of family in transition out of the military; 2) feedback on how specific phases of the IDES process are working and; 3) how service members are functioning now that they are civilians. While we were planning to include a question about social support, participants explained they were specifically interested in whether veterans felt their "family [was] included" in the process. With regard to interest in the

more detailed phases of IDES, interviewees provided specific questions about each phase. For example, questions about helpfulness of liaison officers assigned to the process were of interest to several interviewees. Table 4.2 includes the full list of interviewees' recommendations for the survey.

Table 4.2. Policymaker Contributions to Survey

Themes	Questions/Recommendations
Coordination	• How well are the specific pieces of the process were coordinated with each other? • How well is process is coordinated within each step? • Are the case care managers/Physical Board Liaison Officers/VA representatives assisting with the process effectively?
Mental Illness	• Is this group experiencing the system differently?
Satisfaction	• What are the barriers to getting through the system? • How accurate is the system? • Do people understand the specific pieces of the system? If not, what pieces are the most confusing and why? • Are family members included in the process? • How long did it take to complete the pieces of the process and were people satisfied with that? • Best to evaluate system at the end when people have completed IDES
Transitional resources	• Are people using transitional resources? • What transitional resources are people using? • How are people identifying these resources?
Warrior Transition Units (WTU)/Wounded Warrior Battalions (WWB)	• Does going through a WTU or WWB change the experience of IDES?

Making Research Accessible

Interviewees also discussed how to effectively share research with them. Presenting research in the context of policy was described as vital for research to be useful to policymakers. Interviewees described concise, concrete information that can be quickly and easily understood as far preferable to a journal article. Two interviewees

further detailed how they trust the methodologies academics use and do not need these details in what they receive. Rather, written materials should emphasize key information points that can be used to inform policy decisions. As one participant said, "producing things that are immediately translatable, that are very accessible for people doing the policy work, would be more effective." Interviewees cited time and training as barriers to their ability to delve deeply into academic literature, and their need for targeted, summary information.

Defining "Community"

With military health policy such as IDES, the community extends across political party lines and beyond policymakers in Congress. Representatives from DoD and VA, VSOs, and various think tanks are also stakeholders in policymaking and therefore, their input is important in the formative stages of research. While community members expressed the aforementioned skepticism towards members of the community from organizations different than their own, it was acknowledged that all of these individual community members hold political sway and can guide policy. For instance, staffers working in Congress when IDES originated (4 interviewees) all indicated that IDES originated in the DoD and VA, not in Congress, despite the legislative maneuvering to accomplish the policy change. As one participant stated, many of the high profile VSOs "have a lot of clout on the Hill so people take their calls." As further evidence of the importance of the community as a whole, it was indicated by participants that we should utilize the resources and knowledge of people from all across the community. Policymakers we interviewed recommended that our final sample include representatives from these types of organizations and they often facilitated this by making introductions.

Discussion

The effort described here represents the first time, to our knowledge, that a CBPR approach has been applied to federal policymakers. Our findings build on what is already known about how researchers may best interact with policymakers; it demonstrates that a CPBR approach can connect researchers and policymakers about policy-relevant research generally and inform research questions specifically. Federal policymakers were willing to assist with data collection as both participants and collaborators. They provided thoughtful responses and expressed a willingness to spend a significant amount of time with members of our research team. Policymakers acted as partners when suggesting survey research question topics. That policymakers were interested in, willing to engage in, and able to contribute substantively to an ongoing research project adds to the current literature.

Policymakers expressed an interest in findings from this case study and the planned survey, and were eager for results. While further research is needed to assess the impact of these findings on the role of evidence in policymaking, we view this is a positive first step. Importantly, the data suggest that, in accordance with CPBR theory, by involving the policy community in the formative stages of the research, policymakers will be more interested in and more likely to apply the resulting research.

The desire to participate in research may reflect how interviewees view academics and their research. Specifically, interviewees described academic research as "neutral," especially when compared to other sources of information. They also expressed their view that information from an academic source provided "instant credibility." Previous research demonstrated that the current, most trusted sources of information are

professional organizations (73), but our research demonstrates that these organizations are viewed as more biased than academia. Participants indicated consistently, regardless of party affiliation, that they would like better access to academic research. Researchers have a unique opportunity, and perhaps even a responsibility, to disseminate research in a way that can inform policymaking. The long-term relationships established through the CBPR approach can facilitate such dissemination efforts (80). Furthermore, this type of engagement seems to transcend political party. Further research may reveal if this transcendence is possible across other health related issues.

Participants mentioned these long-term relationships as vital to a collaborative relationship between researchers and policymakers. This study demonstrates that researchers' involvement in policy formation in this setting is more likely to occur if researchers invest in relationships with policymakers. We will disseminate the survey findings to interviewees in order to be responsive to participants' requests and foster longer-term relationships. Consistent with prior findings, we found that policymakers prefer information delivered in a clear, concise and brief format (73, 74).

Another lesson from the CBPR literature that informed this research was the value of recognizing the "community" as a unit of identity. Because there are important veterans' policy organizations external to Congress, researchers who work in this area should recognize this community and include relevant stakeholders in the formative stages of research. By using snowball sampling, our data collection process identified these stakeholders even though they were not part of the purposeful sample and built on the strengths and resources of that community (77, 80). This understanding of community is also vital to contextualizing IDES: it illuminates which perspectives are important to

consider when crafting research questions. Leaving members of the veterans' policymaking community out of the formative stages of research is a missed opportunity to increase the likelihood that study results will inform policy.

Researchers who involve policymakers in a study's formulation are likely to produce data and findings that are more applicable to policymaking. This type of study is an example of how collaborative relationships can promote co-learning among partners, a principle of CBPR (80). This approach also builds on the findings by Innvaer et al., that personal contact with policymakers was important to translating research into policy (75). Our approach provides a framework to accomplish this goal. While it remains to be seen if research resulting from this type of relationship gains traction, the findings from this case study are an important first step.

Applying a CBPR approach to federal policymaking is not without challenges. Several policymakers cited the slower pace of academia as one indication of the differences in culture between the two groups, and a possible barrier to collaboration.

Another challenge for researchers is the tension that often exists between legislators and agencies, and between political parties as reflected by the skepticism interviewees expressed about other stakeholders in the veterans' policymaking community. For instance, the fact that congressional staff expressed that information from other stakeholders was "biased." We took this challenge into account when designing our sampling plan by interviewing individuals across the political spectrum and from several different organizations. We recommend other researchers take a similar approach. This community and its ability to wield political clout is an example of context researchers may want to consider when working with policymakers.

Limitations and Strengths

This is a politically sensitive topic, so some participants may have been unwilling to disclose certain information, or may have responded with a political answer that was not responsive to the study aims. We informed participants we would not share identifying information, which may have allowed them to share sensitive information. We also established relationships with participants, which may have increased trust and encouraged candor, though that was not the goal.

Interviewer and interviewee bias was also a concern(119). We minimized this by triangulating results; we included interviewees with different perspectives and from different organizations(81, 105).

There are a number of strengths associated with this work. The flexibility and responsive nature of qualitative methods allowed is to collect and incorporate unexpected, yet relevant information (81). There is an established track record of political ethnography being used successfully when collecting data from policymakers (120), and this study furthers those efforts in the literature.

Conclusion

The CBPR approach is a viable approach for advancing the translation of research to policy. Considering policymakers as a partner community in the research process was demonstrated in this case study. Participants indicated they would welcome involvement of academia in the policymaking process, and provided input into a survey that we fielded in the months following the in-depth interviews discussed in this manuscript.

Manuscript 3: An Evaluation of the experience of the military's new Integrated Disability Evaluation System for Veterans with Post Traumatic Stress Disorder

Abstract:

Background: The Integrated Disability Evaluation System (IDES), launched in 2007, is intended to streamline the transition process for service members from the U.S. Department of Defense (DoD) to the U.S. Department of Veterans Affairs (VA) by shortening the time to claim adjudication, and increasing satisfaction and understanding of benefits among users. Within IDES, service members with PTSD are of particular interest: it is one of the most common post-deployment illnesses and it can have detrimental long-term effects if untreated.

Methods: We conducted a survey of veterans who had experienced the IDES, comparing those with PTSD to those without PTSD. Within the survey we investigated 4 domains: 1) satisfaction 2) understanding 3) time to complete the IDES and, 4) success of reintegration into civilian life following the IDES. We conducted chi-squared analysis with fisher's exact test to detect differences between groups.

Results: Overall, those with PTSD were less satisfied with the IDES, took longer to complete the IDES and were struggling more to reintegrate into civilian life. No statistically significant differences were found regarding understanding of the IDES.

Conclusion: Those with PTSD are having a harder time with the IDES and continue to struggle once they leave the military as compared to those without PTSD. This is a large and important subgroup and policymaker should address the needs of this population.

Introduction:

In 2008 the Integrated Disability Evaluation System (IDES) was launched with the goal of streamlining the transition process for service members from the U.S. Department of Defense (DoD) to the U.S. Department of Veterans Affairs (VA) by shortening the time to claim adjudication and increasing satisfaction and understanding of benefits among users (5, 10). Within this new system, service members with PTSD are of particular interest because it is one of the most common post-deployment illnesses (121), and the long-term impacts of PTSD for those who do not receive care can be devastating for service members, their families and their communities (29, 33, 34, 122). Furthermore, policymakers responsible for funding the IDES have expressed a specific interest in how service members with PTSD experience the IDES (123).

Prior to the IDES, under the "legacy system," service members were evaluated twice for disability: first by the military, and then by the VA after separating from the military. Often the disability rating would differ with little explanation. In a report on the legacy system written by the Commission on Care for America's Returning Wounded Warriors, veterans described the process as confusing and onerous, and reported low satisfaction with the system (5). This document is commonly referred to as the Dole-Shalala report, after its two chairs, and is the last major study on the legacy system before the transition to the IDES. The IDES eliminated the dual evaluation process: a service member now receives one rating from the VA prior to leaving the military.

Under the IDES, an injured or ill service member is first referred to the Medical Evaluation Board (MEB), and the MEB assigns the service member a Physical Evaluation Board Liaison Officer (PEBLO) to assist them through the process. A service member may also have a case manager who is responsible for ensuring they keep their appointments and

receive needed care. Unlike a PEBLO, a Case Manager is not responsible for administrative tasks associated with securing a disability status. The MEB assesses whether the service member has an injury or illness that would *potentially* make them unfit for military service. If this is the case, the service member is referred to the Physical Evaluation Board (PEB). The PEB determines if the service member will continue to serve or be medically discharged. During this phase the VA determines the level of disability the service member will receive. During the MEB phase, service members meet with a VA clinician to evaluate their condition. During the PEB phase the service member has the opportunity to appeal the decisions about their fitness to serve and/or their assigned level of disability. If the service member is deemed medically unfit to serve, they will transition out of the military. According to the IDES policy, they should receive a letter from the VA informing them of their VA benefits within 30 days of this decision (124).

Despite the promise that the IDES would improve the transition process (125), reports indicate that it is fraught with problems. A Government Accountability Office (GAO) analysis of the IDES pilot found that staff shortages threatened system-wide implementation (54). A follow-up study documented that wait times increased as the pilot progressed (126). The Recovering Warriors Task Force (RWTF), charged by Congress with overseeing the IDES, has published reports detailing problems with the system during the initial 4 years of implementation (2011-2014) and in 2014 it called for a complete overhaul of the IDES (3). This recommendation was based, in part, on survey findings that the PEB phase took longer than expected for half of the service member respondents who transitioned under the IDES, and that only just over one-third (35%) rated the IDES as extremely or very helpful [11]. They also cited research indicating similar concerns about the MEB phase of the process

(127). The RWTF visited VA facilities and were consistently told of service members' deep dissatisfaction with the IDES (3).

Problems securing an adjudication may be particularly detrimental for PTSD patients. Despite the fact that the severity of symptoms may vary over the life-course of the illness (7), one study found that the odds of impoverishment were significantly lower for veterans with PTSD who were receiving VA disability benefits compared to veterans with PTSD who were not receiving disability benefits (46). Another study demonstrated reductions in homelessness and clinically meaningful reductions in PTSD symptomology for individuals receiving VA benefits for PTSD compared to those that were not receiving benefits (44). In addition to a disability classification, family support is another factor that can help veterans with PTSD reintegrate into civilian life (128, 129).

PTSD is among the ten most common disabilities for which veterans receive benefits, and the second most common benefit diagnosis for the Army, the largest service branch (16). The percent adjudicated for PTSD among all who medically separated from the Army increased from an average of 20% in the years 2008 to 2012 to 31% in 2013 (16). However, these numbers likely underestimate the issue. Research shows that several barriers exist for those who require a diagnosis, care or compensation for PTSD getting the help they need. These include stigma (130) and logistical problems such as not knowing where to seek care, or not having transportation to get to an appointment (20). Access to mental health care, in the form of a clinician or a lay-person trained to provide mental health services, can prevent chronic PTSD and improve the lives of veterans with PTSD (12-15, 131). Despite the growing magnitude of this issue, we are unaware of any research that investigates the experience of the IDES for service members diagnosed with PTSD.

Here we report on findings from a study to assess the transition experience under the IDES for those diagnosed with PTSD compared to those without a PTSD diagnosis. We used an established survey instrument (5) enhanced with new questions developed through a series of in-depth interviews with policymakers who work on military and veterans issues (123). By incorporating these questions into the survey, this study also aims to build on the interview findings and inform policy recommendations about priority topics identified by policymakers (123) with the ultimate goal of improving the IDES, particularly for PTSD patients. We hypothesized that compared to those without PTSD 1) those with PTSD would take longer to get through the IDES; 2) they would have a worse understanding of the process; 3) they would have poorer health; and 4) their satisfaction with the system would be lower.

Methods:

We developed and fielded an electronic survey in July 2015 among a sample of veterans through a national Veterans' Service Organization (VSO). The study population was limited to veterans who experienced the IDES. The sample was a stratified random sample drawing on the membership of the VSO, which was the best feasible option for procuring a sufficiently sized sample. The VSO verifies the veteran status of its members and maintains an extensive email list. To be eligible for the survey, respondents had to be medically discharged with an attempt to procure disability status after January 2012 (IDES became fully operational in October 2011).

Study Sample:

We partnered with the aforementioned VSO to identify a sample in which statistically significant differences could be detected for the main variable of interest: PTSD diagnosis. We built the sample using the entire VSO database by first excluding those that separated

from the military prior to IDES implementation. All of the VSO members were injured or became ill as a result of their military service, and a high proportion had medically separated. We divided the group between those with a PTSD diagnosis and those without. All those with a PTSD diagnosis who had separated after January 2012 were selected. We then used a random number generator to select 500 individuals in this group for the final sample, and repeated this process for those without a PTSD diagnosis.

Instrument Development:

We began with the survey instrument used by the Dole-Shalala commission to evaluate the legacy system (5). First, we added questions to screen participants for inclusion criteria, as described below in the sampling section. We then added and removed questions based on the findings from interviews we conducted with policymakers (123) and our focus on PTSD. Our prior qualitative research revealed three domains not included in the Dole-Shalala survey that we incorporated into our final survey: 1) family involvement in the evaluation process; 2) outcome measures related to how well a veteran is functioning; and 3) feedback on how individual steps within the larger system are working (123). We added established items, including a life satisfaction question from the Behavioral Risk Factors Surveillance System (97) and a general health item from the Veterans Rand 12 Item Health Survey, sometimes referred to as the short form one (SF-1) question instrument (98), to collect this information.

In addition, we added established measures from the military's Defense Manpower System to collect demographic data such as housing status and ethnicity (6), to account for potentially confounding variables and enhance our description of the final sample. We also added the four-question PTSD screen used by the military (97), which has also been used in

the literature to screen for PTSD (7). We added a pre-established question about current diseases and injuries among veterans (8) to collect information on other illnesses. We altered items from the Dole-Shalala instrument to deconstruct aspects of the evaluation process, as described elsewhere (116). Because we were interested in satisfaction, in keeping with established methodology to deconstruct parts of the patient experience to establish satisfaction domains (101), we altered items from the Dole-Shalala instrument so greater detail on facets of satisfaction could be collected, also described elsewhere (116).

We distributed the completed instrument to five veterans who were familiar with the IDES. The revised survey was then pilot tested with 2 veterans who had direct experience with the IDES and we incorporated their feedback into the next iteration of the survey. We then input this version of the survey into Qualtrics (95) and nine individuals tested the online survey to ensure that the instrument and the associated demographic data uploaded correctly to the database. All of these individuals were also familiar with the IDES.

Measurements:

We measured PTSD in two ways: 1) a PTSD diagnosis using the four-item screen for PTSD used by the military; and 2) previously collected self report information if the veteran had been adjudicated for PTSD. This latter item was collected by the VSO when the veteran applied for membership in their organization.

Potentially confounding variables to be considered in our analysis included: gender, military rank (officer vs. enlisted), duty status (active vs. enlisted), age, years of service, education level, percent disability, military branch, marital status, health status and housing status. The VSO already had information on age, years of service, military branch, and rank, and they loaded this information into the database before the survey was distributed. Marital

status, education level and housing status were identified using items from Miller et al [22]. These items are also used frequently by the military's Defense Manpower Data System (6, 99). Percent disability was established using an item from the survey on the legacy system conducted by Dole et al (5).

Data Procurement:

The 1,000 VSO members sampled received an email invitation to participate in the survey followed by a weekly email reminding them to participate. Only those who had not completed the survey received the reminder emails. The survey link was unique, meaning only the person who received the email could use the link to fill out the survey and once the veteran had completed the survey, the link no longer worked. This eliminated the possibility that those who were not sampled could participate and it ensured that each participant could only participate once.

Analysis:

We conducted univariate analyses to obtain a distribution of demographic characteristics of the respondents and to assess whether the demographics of the sample fit expectations based on the sampling strategy. Univariate analyses were also conducted to obtain a distribution for each individual question.

Then, the hypothesis that those with PTSD would have a worse experience in the IDES was tested through a bivariate analysis of the individual questions. A chi-squared odds ratio analysis with Fisher's exact test was used to detect statistical differences between those that had PTSD and those that did not. The survey questions can be broken down into four domains: understanding of the IDES process, satisfaction with the IDES process, length of time to complete the IDES process, and current health status.

In bivariate analyses we dichotomized the categories. When there were five options, we grouped the top three (positive) outcome categories together and the bottom two (negative) outcomes categories together. We chose to dichotomize this way because we were most concerned with singling out dissatisfaction; by grouping the two variables that indicated dissatisfaction together, we were able to gain a clearer picture of this perception specifically. This was important as parts of the IDES that are high dissatisfactory are the best place to focus resources for improvement and that translates into concrete policy recommendations. When there were three options we grouped the top two together and compared this with the bottom option and when there were four options we dichotomized so that we compared the top two options with the bottom two options. We also dichotomized age, length of service, and each stage of the IDES by dividing the sample in half so that there were roughly an equal number of participants in each group.

We also conducted bivariate exploratory analyses to look at process satisfaction domains for women and Guard/Reservist sub-group differences for PTSD vs. no-PTSD. We did not have a sufficient sample size to conduct statistical analyses on these subgroups but, because the literature demonstrates that these subgroups experience PTSD or the evaluation system differently (24-27, 40, 42), exploratory analysis was warranted. We also conducted subgroup analyses comparing those who screened positive for PTSD but did not self-identify as having PTSD with those who self- identified as having PTSD.

We then conducted bivariate regression on every potential confounding variable against key satisfaction, understanding, health outcome, and length variables so we could determine which variables should be included in multivariate regression models. Multivariate regression was then conducted to control for confounding variables. Those determined to be

significant in bivariate analysis and were controlled for in regression analysis included: age, duty status, percent disability, and SF-1 score.

Results

The 1,000 VSO members identified through the sampling process received an email from the VSO inviting them to participate in a survey about the IDES. Fourteen of those emails were returned as undeliverable and no further attempt was made to reach them. 177 people clicked on the link and began the survey. Of these, 80 met the study criteria. The remaining 97 screened out of the survey after answering the three screening questions. Four participants who met the inclusion criteria began the survey but did not complete the questions and were dropped from analysis. Similarly, there were aspects of the IDES process not all respondents experienced. For instance, only 51 participants had a Case Manager. Everyone who did not have a Case Manager, a PEBLO, or a physician's exam was excluded from the analysis of questions on those topics. Univariate analysis demonstrated respondents were predominantly male (64%); and most were Army veterans (84%). 51% of respondents were under 40 years old. Respondents were mostly (72%) white. They were also overwhelmingly enlisted (86%). The majority (64%) had a high school or vocational school education. For the main variable of interest, PTSD, roughly half (58%) self identified as being adjudicated for PTSD. This demographic composition is similar to the military-wide demographic composition of those who became sick or injured as a result of their injuries in the wars in Iraq and Afghanistan (99). A full demographic breakdown of the sample can be found in table 5.1.

Table 5.1 also shows that respondents who met the inclusion criteria closely resembled the demographic breakdown of the sample and all respondents in most domains.

There were a couple of noted differences: just 36% of the sample was female but the panel was 50% female and respondents (including those who were screened out of the survey) were older than those in the panel. 51% of the sample was below the age of 40, while 63% of the panel was below the age of 40. For characteristics where information was not available, the table indicates this.

Table 5.1. Demographic Characteristics: Sample, Respondents, Respondents who met Inclusion Criteria

	Respondents who met inclusion criteria		***All respondents***		***Sample***	
Characteristic	**number**	**%**	**number**	**%**	**number**	**%**
Gender						
Male	51	63.75	103	59.2	500	50
Female	29	36.25	71	40.8	500	50
Age						
39 years or below	41	51.25	93	53.45	630	62.94
40 years or above	39	49.75	81	46.55	371	37.06
Branch						
Army	67	83.75	141	83.43	809	80.82
Air Force	6	7.5	16	9.47	62	6.19
Navy	3	3.75	4	2.37	67	6.69
Marine Corps	4	5	8	4.73	63	6.29
Years of service						
Ten years or less	39	48.75	90	51.72	562	56.14
11-20 years	21	26.25	41	23.56	255	25.47
more than 20 years	20	25	43	24.71	184	18.38
Rank						
Enlisted	70	87.5	153	87.93	908	90.71
Officer	10	12.5	21	12.07	93	9.29
Race						
White	57	72.15	N/A	N/A	N/A	N/A
Black	19	24.05	N/A	N/A	N/A	N/A
Asian	1	1.27	N/A	N/A	N/A	N/A

Native American/ Pacific Islander	2	2.53	N/A	N/A	N/A	N/A
Hispanic						
Yes	11	13.75	N/A	N/A	N/A	N/A
No	69	86.25	N/A	N/A	N/A	N/A
Education Level						
High School	10	12.5	N/A	N/A	N/A	N/A
Vocational School	41	51.25	N/A	N/A	N/A	N/A
College	23	28.75	N/A	N/A	N/A	N/A
Graduate School	6	7.5	N/A	N/A	N/A	N/A
Duty status at time of injury						
Mobilized Guard or Reserve	35	43.75	N/A	N/A	N/A	N/A
Active Component	44	55	N/A	N/A	N/A	N/A
Don't know	1	1.25	N/A	N/A	N/A	N/A
Marital status						
Single	12	15	N/A	N/A	N/A	N/A
Living together, not married	7	8.75	N/A	N/A	N/A	N/A
Married	33	41.25	N/A	N/A	N/A	N/A
Separated/divorced/ widowed	28	35	N/A	N/A	N/A	N/A
How majority of time is spent						
Going to school	11	13.92	N/A	N/A	N/A	N/A
Working	13	16.46	N/A	N/A	N/A	N/A
Rehabilitation	19	24.05	N/A	N/A	N/A	N/A
Laid off/looking for work	8	10.13	N/A	N/A	N/A	N/A
Taking care of family	15	18.99	N/A	N/A	N/A	N/A
Other	12	15.19	N/A	N/A	N/A	N/A
Don't know	1	1.27	N/A	N/A	N/A	N/A
Living situation						
Military housing	1	1.25	N/A	N/A	N/A	N/A
Civilian housing, own	38	47.5	N/A	N/A	N/A	N/A
Civilian housing, rent	25	31.25	N/A	N/A	N/A	N/A

Living with friends	7	8.75	N/A	N/A	N/A	N/A
Other	8	10	N/A	N/A	N/A	N/A
Don't know	1	1.25	N/A	N/A	N/A	N/A
Illness and Injury						
Knee injury	1	1.27	N/A	N/A	N/A	N/A
Traumatic arthritis	2	2.53	N/A	N/A	N/A	N/A
Hypertension	1	1.27	N/A	N/A	N/A	N/A
Diabetes	1	1.27	N/A	N/A	N/A	N/A
Major Depressive Disorder	6	7.59	N/A	N/A	N/A	N/A
Substance Abuse Disorder	1	1.27	N/A	N/A	N/A	N/A
Other medical condition	21	26.58	N/A	N/A	N/A	N/A
PTSD	46	58.23	95	54.6	499	49.9
Comorbid illness/injury with						
Yes PTSD	42	52.5	N/A	N/A	N/A	N/A
No PTSD	33	97	N/A	N/A	N/A	N/A
Total	80		177		986	

Satisfaction Domains

In chi-squared analyses comparing the satisfaction domains, we found that, overall those with PTSD were less satisfied with the IDES (tables 5.2 and 5.3), and the difference between the groups was statistically significant. When asked to compare how long the VA portion of the IDES process would take compared to how long it *actually* took, 72% of those with PTSD reported longer than expected times compared to 43% of those without PTSD. The inclusion of family in the process was also a problem for those with PTSD: 26% of those with PTSD indicated their family was invited into the process compared to 53% of those without PTSD. On the issue of how they were treated during the process, 29% of participants with PTSD reported they were not treated with respect by clinical staff compared to 4% of those without PTSD. Finally, 25% of those with PTSD ranked all of the satisfaction domains

in one of the two most dissatisfied categories compared to no one without PTSD. Similarly, 11% of those with PTSD ranked the PEB in the two dissatisfied categories for all domains for the PEB compared to no one without PTSD. The remaining items further suggest that those with PTSD are less satisfied than those without PTSD but, the results were not statistically significant.

When looking at satisfaction with those assigned to help with the IDES process, our results show that those with PTSD had a worse experience (table 5.3). Just 43% of those with PTSD felt that their Case Manager kept them informed about their case compared with 74% of those without PTSD. Finally, 50% of those with PTSD felt their Case Manager listened to them carefully compared to 84% of those without PTSD. Also worth noting is that those with PTSD rated the Case Managers worse in every category than those without PTSD.

Subgroup analysis demonstrated that within the subgroup of women and Reserve/National Guard veterans, those with PTSD were similarly dissatisfied. However, due to limited sample size the results were not statistically significant. Tables with results of this analysis are available in Appendix G, tables 7.11-7.12.

Table 5.2. Satisfaction with Process

Question	***no PTSD***		***PTSD***		***total***		***p-value***
	number	%	number	%	number	%	
MEB process							
I was kept informed of the status of my evaluation by the MEB							
Disagree	9	28.13	23	52.27	32	42.11	
Agree	23	71.88	21	47.73	44	57.89	
							0.059
How easy was it for you to get medical records needed for your disability evaluation as part of the MEB?							
Difficult	10	31.25	21	50.00	31	41.89	
Easy	22	68.75	21	50.00	43	58.11	
							0.154
Compared to what you expected, do you think the MEB process was…							

Longer or about what I expected	16	53.33	24	60.00	40	57.14	
Shorter	14	46.67	16	40.00	30	42.86	
							0.631
The MEB process was fair							
Disagree	9	29.03	20	48.78	29	40.28	
Agree	22	70.97	21	51.22	43	59.72	
							0.145
The final MEB determination was fair							
Disagree	11	34.38	21	51.22	32	43.84	
Agree	21	65.63	20	48.78	41	56.16	
							0.164
PEB process							
I was kept informed of the status of my evaluation by the PEB							
Disagree	7	21.88	17	41.46	24	32.88	
Agree	25	78.13	24	58.54	49	67.12	
							0.077
How easy was it for you to get medical records needed for your disability evaluation as part of the PEB?							
Easy	10	31.25	16	41.03	26	36.62	
Difficult	22	68.75	23	58.97	45	63.38	
							0.395
Compared to what you expected, do you think the PEB process was …							
Longer	13	46.43	21	58.33	34	53.13	
About what I expected or Shorter	15	53.57	15	41.67	30	46.88	
							0.344
The PEB process was fair.							
Agree	8	25.81	17	44.74	25	36.23	
Disagree	23	74.19	21	55.26	44	63.77	
							0.436
The final PEB determination was fair							
Agree	11	35.48	17	44.74	28	40.58	
Disagree	20	64.52	21	55.26	41	59.42	
							0.436
VA Claims Process							
The VA kept me informed about the status of my claim							
Disagree	15	48.39	24	70.59	39	60.00	
Agree	16	51.61	10	29.41	26	40.00	
							0.068
Compared to what you expected, do you think the VA claims process was…							
Longer or about what I expected	10	43.48	21	72.41	31	59.62	
Shorter	13	56.52	8	27.59	21	40.38	

							0.035*
The VA claims process was fair							
Agree	16	57.14	19	59.38	35	58.33	
Disagree	12	42.86	13	40.63	25	41.67	
							0.861
The final VA determination was fair							
Agree	17	60.71	15	48.39	32	54.24	
Disagree	11	39.29	16	51.61	27	45.76	
							0.343
Was the VA rating you received...							
Lower	17	70.83	27	90.00	44	81.48	
About what you expected or higher	7	29.17	3	10.00	10	18.52	
							0.072
Family Support							
My family was included in the disability evaluation process							
Agree	17	53.13	10	25.64	27	38.03	
Disagree	15	46.88	29	74.36	44	61.97	
							0.027*
Clinician Visit							
I was taken to the exam room in a reasonable time							
Disagree	0	-	4	12.12	4	7.14	
Agree	23	100.00	29	87.88	52	92.86	
							0.136
I was treated by the clinician with dignity and respect							
Disagree	1	4.35	10	29.41	11		
Agree	22	95.65	24	70.59	46		
							0.037*
The clinician listened to me							
Disagree	5	21.74	15	44.12	20	35.09	
Agree	18	78.26	19	55.88	37	64.91	
							0.098
The staff at the doctors office was helpful							
Disagree	0	-	3	7.14	3	5.26	
Agree	15	100.00	39	92.86	54	94.74	
							0.125

Table 5.3. Satisfaction with Assistance with the Process

Question	*no PTSD*		*PTSD*		*total*		*p-value*
	number	%	number	%	number	%	
PEBLO							
Did your PEBLO keep you informed about your case?							
No	14	56.00	12	31.58	26	41.27	
Yes	11	44.00	26	68.42	37	58.73	
							0.07
Treat you with courtesy and respect?							
No	6	24.00	7	18.92	13	20.97	
Yes	19	76.00	30	81.08	49	79.03	
							0.753
Help you as much as you thought he/she should?							
No	10	41.67	12	31.58	22	35.48	
Yes	14	58.33	26	68.42	40	64.52	
							0.43
Listen carefully to you?							
No	11	44.00	11	29.73	22	35.48	
Yes	14	56.00	26	70.27	40	64.52	
							0.288
Compile all the materials you needed for your case to move forward with the disability evaluation process?							
No	14	56.00	16	47.06	30	50.85	
Yes	11	44.00	18	52.94	29	49.15	
							0.601
Case Manager							
Did your case manager keep you informed about your case?							
No	5	26.32	17	56.67	22	44.90	
Yes	14	73.68	13	43.33	27	55.10	
							0.045*
Treat you with courtesy and respect?							
No	2	10.00	10	32.26	12	23.53	
Yes	18	90.00	21	67.74	39	76.47	
							0.067
Help you as much as you thought he/she should?							
No	5	26.32	16	53.33	21	42.86	
Yes	14	73.68	14	46.67	28	57.14	
							0.081
Listen carefully to you?							
No	3	15.79	15	50.00	18	36.73	

Yes	16	84.21	15	50.00	31	63.27	
							0.018*
Compile all the materials you needed for your case to move forward with the disability evaluation process?							
No	5	27.78	16	59.26	21	46.67	
Yes	13	72.22	11	40.74	24	53.33	
							0.066
Coordinate with your PEBLO to ensure that your case moved smoothly?							
No	6	35.29	15	51.72	21	45.65	
Yes	11	64.71	14	48.28	25	54.35	
							0.363

Understanding Domains

Although not statistically significant, we found that 58% of those with PTSD indicated that they did not understand the PEB process, compared to 38% of those without PTSD.

Table 5.4. Understanding of the Process

Question	***no PTSD***		***PTSD***		***total***		***p-value***
MEB							
How well did you/do you understand the MEB process?							
Didn't understand	12	37.50	25	58.14	37	49.33	
Understand	20	62.50	18	41.86	38	50.67	
							0.103
PEB							
How well did you/do you understand the PEB process?							
Didn't understand	16	53.33	25	59.52	41	56.94	
Understand	14	46.67	17	40.48	31	43.06	
							0.636
VA Claim							
How well did you/do you understand the VA Claims process?							
Didn't understand	21	91.30	21	80.77	42	85.71	
Understand	2	8.70	5	19.23	7	14.29	
							0.424
Clinician visit							
The clinician explained things to me in a way I could understand							
Disagree	1	16.67	7	41.18	8	34.78	
Agree	5	83.33	10	58.82	15	65.22	

							0.379
Assistance							
Did you PEBLO explain the outcome at each stage of the process?							
No	11	44.00	11	30.56	22	36.07	
Yes	14	56.00	25	69.44	39	63.93	
							0.416
Did your case manager answer any questions you had about the process?							
No	9	47.37	21	70.00	30	61.22	
Yes	10	52.63	9	30.00	19	38.78	
							0.141
Did your case manager explain things in way that was easy to understand?							
No	4	20.00	13	43.33	17	34.00	
Yes	16	80.00	17	56.67	33	66.00	
							0.129

Outcome Domains

The outcome domains demonstrate with statistical significance that those with PTSD are struggling more now that they are civilians (table 5.5). 58% of respondents with PTSD are dissatisfied with life compared to 32% of those without PTSD. We also found that those with PTSD felt that their general health was worse: 75% of the sample with PTSD rated their health as poor or fair compared to 53% of those without PTSD, however this result was not significant. Respondents with PTSD were also more likely to be going to rehabilitation whereas respondents without PTSD were more likely to be attending school or going to a job.

Table 5.5. Outcome Domains

Question	***no PTSD***		***PTSD***		***total***		***p-value***
	number	%	number	%	number	%	
In general, how satisfied are you with your health?							
Dissatisfied	11	32.35	23	57.5	34	45.95	
Satisfied	23	67.65	17	42.5	40	54.05	
							0.037*
In general, would you say your health is…							
Poor-Fair	18	52.94	30	75	48	64.86	
Good-Very good	16	47.06	10	25	26	35.14	

							0.055
What would you say best describes what you have being doing for the majority of your time over the past month? Have you been…							
Don't know	1	2.94	0	-	1	1.25	
Going to school	6	17.65	5	10.87	11	13.75	
Working	7	20.59	6	13.04	13	16.25	
Rehabilitation	3	8.82	16	34.78	19	23.75	
Laid off/looking for	5	14.71	3	6.52	8	10.00	
Taking care of family	7	20.59	8	17.39	15	18.75	
Other	5	14.71	7	15.22	12	15.00	
Missing	0	-	1	2.17	1	1.25	

Length of Process Domains

It also took longer for those with PTSD to receive a determination from the VA and to complete the PEB processes within IDES (76% and 65%, respectively) compared to 50% and 32% respectively of those without PTSD. However, it should be noted that a large portion of respondents (17%) did not know how long it took for them to complete these processes. These individuals were not included in the chi-squared analysis but they are noted in table 5.6.

Table 5.6. Length of Process

Phase	***No PTSD***		***PTSD***		***total***		***p-value***
MEB	number	%	number	%	number	%	
35 weeks or less	18	37.50	18	32.73	36	34.95	
36 weeks or more	16	33.33	28	50.91	44	42.72	
Don't know	11	22.92	6	10.91	17	16.50	
Missing	3	6.25	3	5.45	6	5.83	
							0.26
PEB							
5 weeks or less	23	41.07	16	25.40	39	32.77	
6 weeks or more	11	19.64	30	47.62	41	34.45	
Don't know	22	39.29	14	22.22	36	30.25	
Missing	0	-	3	4.76	3	2.52	
							0.006*

VA Claims							
12 weeks or less	17	29.31	11	15.49	28	21.71	
13 weeks or more	17	29.31	35	49.30	52	40.31	
Don't know	15	25.86	9	12.68	24	18.60	
Missing	9	15.52	16	22.54	25	19.38	
							0.019*

For each of these dichotomized domains (satisfaction with process and assistance with the process, understanding of the system, length of time to complete the process and outcomes), tables with non-dichotomized descriptions of the results are available in Appendix G, tables 7.1-7.4. This also includes the number of people who did not know the answer to the question and missing data.

Confounding Variables

We conducted bivariate analyses on potential confounding variables to determine what variables should be included in multivariate regression. This analysis revealed that age, percent disability, health status, duty status, and self-perceived health status were potentially significant confounding variables. However, no significant results were detected in regression analyses. Tables with full details of the results of this bivariate analysis are available in Appendix G, tables 7.5-7.10.

Sensitivity Analysis

We conducted sensitivity analysis (dichotomizing the answer choices with the top two vs. the bottom three and comparing outcomes) that revealed a large number of participants who fell into the neutral category when there were five options. This was true for both those with PTSD and those without PTSD, meaning that both groups changed at roughly the same rate proportionally. For instance, when asked to respond to the question "How easy was it for you to get medical records needed for your disability evaluation as

part of the PEB?" for both the PTSD and no PTSD group, 17% of the participants changed from the "agree" group to the "disagree group" (or vise versa) based on the change in the dichotomization. A table with the full sensitivity analysis is available in Appendix G, table 7.11.

PTSD measures

We compared those that screened positive for PTSD to those who self-identified as having been adjudicated for PTSD (table 5.7). We found that while only 42% of the sample self-identified as being adjudicated for PTSD, 81% of 74 participants who completed all four questions of the PTSD screen screened positive for PTSD. Interestingly, of those who self-identified as having been adjudicated for PTSD just 35% were male while of those who screened positive, 63% were male. Just two individuals self-identified as positive for PTSD but screened negative compared to 22 individuals who screened positive but self identified as negative. Interestingly, those who screened positive but self-identified at not having PTSD had greater satisfaction with the IDES. They found the process and determinations to be fair at a higher rate and they found the MEB, PEB, and VA claims process to be shorter than expected at a higher rate than those who self-identified as having PTSD. Also worth noting is that 55% felt their family was included in the process compared to just over 25% of those who self-identified as having PTSD.

Table 5.7. Comparing Positive PTSD Screen to Self-Identified as Adjudicated for PTSD

Score Positive Vs. Self-Identification				
Self ID PTSD	score negative	score positive		Total
No	12	22		34
Yes	2	38		40
Total	14	60		74

Demographic Characteristics	self-ID PTSD		PTSD screen	
	number	%	number	%
Gender				
Female	16	65.22	22	36.67
Male	30	34.78	38	63.33
Race				
White	34	75.56	44	74.58
Black	9	20	13	22.03
Asian	0	0	1	1.69
Native American/Pacific Islander	2	4.44	1	1.69
Branch				
Army	38	82.61	49	81.67
Air Force	3	6.52	6	10
Navy	1	2.17	3	5
Marine Corps	4	8.7	2	3.33
Rank				
Enlisted	41	89.13	53	88.33
Officer	5	10.87	7	11.67
Duty Status				
Active duty	22	49	31	47.45
Reserve	23	51.00	28	52.54
Age				
Ten years or less	14	30.43	19	31.67
11-20 years	17	36.96	21	35
More than 20 years	15	32.61	20	33.33
Years in the Military				
Ten years or less	20	43.48	27	45
11-20 years	15	32.61	18	30
More than 20 years	11	23.91	15	25
Differences in responses to key satisfaction items				
	Self-ID PTSD		Positive PTSD screen, no Self-ID PTSD	
MEB	number	%	number	%
Compared to what you expected, do you think the MEB process was…	24	60.00	9	47.37
Longer	16	40.00	10	52.63
Shorter				
The MEB process was fair				
Disagree	20	48.78	5	23.81
Agree	21	51.22	16	76.19

The final MEB determination was fair				
Disagree	21	51.22	8	36.36
Agree	20	48.78	14	63.64
PEB				
Compared to what you expected, do you think the PEB process was…				
Longer	21	58.33	8	42.11
Shorter	15	41.67	11	57.89
The PEB process was fair				
Disagree	17	44.74	5	23.81
Agree	21	55.26	16	76.19
The final PEB determination was fair				
Disagree	17	44.74	8	36.36
Agree	21	55.26	14	63.64
VA Claims Process				
Compared to what you expected, do you think the VA claims process was…				
Longer	21	72.41	7	50
Shorter	8	27.59	7	50
The VA claims process was fair				
Disagree	19	59.38	10	58.82
Agree	13	40.63	7	41.18
The final VA determination was fair				
Disagree	15	48.39	11	64.71
Agree	16	51.61	6	35.29
Compared to what you expected was your rating…				
Lower	27	90.00	4	28.57
About the percentage you expected or higher	3	10.00	10	71.43
Family Support				
My family was included in the Disability Evaluation Process				
Disagree	29	74.36	9	45.00
Agree	10	25.64	11	55.00

Discussion

This study demonstrates that, among the respondents to this survey, those with PTSD report more challenges with the IDES than those without PTSD, and suggests they continue to struggle as they reintegrate into civilian life. Overall life satisfaction and self-perceived health status measures were both worse in respondents with PTSD. Furthermore, those with PTSD were more likely to be going to rehabilitation as opposed to working or going to school. Satisfaction with the IDES process overall was lower for respondents with PTSD and they reported more problems with specific components of the system such as Case Workers. Finally, it also those with PTSD reported that it took longer to complete the PEB phase and the VA claims process. This result is also true for those in the subcategories (women and guard/reservists) we investigated, although not statistically significant. These results were expected as those with PTSD typically indicate they have low satisfaction with aspects of life and perceive their health as being poor (29, 132).

Especially concerning was that respondents with PTSD indicated that their families were not included in the disability evaluation process more often than those without PTSD (25% vs. 53% respectively). For both groups these results differ from the Dole-Shalala survey: fewer service members indicated that their family was invited into the process than what was found in that study. They found that 60% were satisfied with how their family was included in the process (5). However, in the Dole-Shalala survey they were asking about family involvement over the entire course of injury or illness and not just the disability evaluation phase.

It should be noted that those with PTSD often struggle with personal relationships (29) so this may contribute our findings but, family support can be vital to PTSD patients

successfully transitioning out of the military because it is one of the strongest recovery factors for PTSD (128, 129). By involving family in the process, the IDES can foster this important relationship for service members. Furthermore, policymakers indicated specific concern with this issue (123). This survey result suggests a need to more frequently involve family members of those with PTSD in the IDES.

The results also show that Case Workers are a particular piece of the process that could use improvement. Respondents with PTSD are less satisfied with Case Workers compared to respondents without PTSD: 57% of respondents with PTSD indicated that their Case Manager did not keep them informed of their case compared to just 26% of those without PTSD. Also, 50% of respondents with PTSD reported their Case Manager did not listen carefully to them compared to just 16% of respondents without PTSD. Additionally, while not statistically significant, respondents with PTSD reported that Case Workers did not help them to understand the IDES: 70% of respondents with PTSD indicated that their Case Manager did not answer questions about the IDES process compared to just 47% of those without PTSD. This is particularly concerning because the main function of a Case Worker is to help the separating service member understand the IDES. Policymakers expressed an interest in how Case Workers were functioning within the system (123).

Those with PTSD also reported that the system takes longer for them: we found that 49% of respondents with PTSD report taking 13 weeks or longer to secure a VA claim compared to just 29% of those without PTSD. It should be noted that for both groups, these wait times are an improvement over what the Dole-Shalala commission found for the legacy system (5). For the PEB it took 48% of respondents with PTSD 6 weeks or more to complete the process compared to 20% of respondents without PTSD. This means that the respondents

with PTSD were living without VA benefits for longer than those without PTSD. This is particularly concerning as disability benefits have a demonstrated impact on improving the lives of those with PTSD (44, 46) and languishing in the system can be frustrating and detrimental to the health of those with PTSD (5). Previous research shows that policymakers are concerned with this portion of the process (116).

Another specific area of concern that our results demonstrate is that while just 58% of our respondents self-identified as having been adjudicated for PTSD, 81% of those who completed the military's four question PTSD screen were positive. While this result is interesting and potentially meaningful from a policy perspective, it should be noted that PTSD symptoms vary in terms of severity over the life-course of the illness (7) and the four-question screen used in this study is not the gold standard for assessing PTSD and is a highly sensitive screening tool. Despite these caveats, however, the magnitude of the difference is still concerning as it suggests that the system is potentially either missing these individuals or they are not receiving a PTSD adjudication for some other reason. The literature demonstrates that stigma around mental illness is one potential reason that these individuals were not adjudicated for PTSD (130). However, it has also been demonstrated that logistical problems can also be a barrier to diagnoses or treatment for PTSD (20) meaning there are potentially systematic problems with the IDES that are causing those with PTSD to be missed in the adjudication process. This result is particularly troubling as disability benefits can greatly improve the lives of those with PTSD [15, 16]. More research is warranted to fully explore this result.

We also found that there was a high incidence of comorbid illness among those with PTSD. 52% of those with PTSD also had a comorbid illness for which they were also

receiving disability payments. While this does indicate that those with PTSD may be sicker overall, and this contributes to their experience of the IDES, nearly half of the sample did not have a comorbid illness or injury, especially compared to those without PTSD. Of those without PTSD, 97% of the sample had a comorbid illness or injury. We did not have a sufficient sample size to conduct further analysis on those who just had PTSD but, it would be a useful avenue of research.

Policy Recommendations

This survey was designed to be responsive to the needs of policymakers. As such, we collected information on specific portions of the IDES process to inform policy questions. Policymakers are concerned about how well family is being integrated into the process, how those with PTSD are faring post-IDES, and how specific components of the process are working (116). Based on the findings, we offer the following recommendations:

1. Require Case Managers and PEBLOs to formally invite family members to attend meetings and collect family members' contact information so they can be invited to future meetings.
2. Fund and provide logistical support for additional mental health training for Case Workers so they can work more effectively with those with PTSD and potentially refer service members who have PTSD but are not in treatment. Training lay-persons to work with PTSD patients has worked in other settings (131).
3. Fund DoD claims specialists, who are already trained, to work for the VA until the IDES backlog is reduced or eliminated. Since it takes time and resources to

train VA claims specialists (116), this will provide an immediate solution to this problem.

Strengths and Limitations

The major limitation in this study was the response rate. While every effort was made to draw a stratified random sample, there is still potential for response bias as a result of the low response rate. We drew the sample from a VSO. VSO-affiliated veterans are already more likely to be involved in the veterans' community and advocacy on behalf of veterans, and therefore do not reflect the general veterans population (8). This also impacts response bias because the people who responded may potentially be involved with an advocacy organization because they had a bad transition experience. We were also unable to compare the demographic data on those with PTSD in our sample to those in the larger IDES system who have PTSD because there is a noted absence of this in information in the literature (133). To address this and minimize selection bias, we drew a random sample of those with PTSD from the available panel. Finally, we were also limited in the analyses we could conduct because of the small sample size.

Despite the limitations of our respondents, the demographic composition of respondents closely reflected those who became sick or injured as a result of their service (99). The survey instrument was also built by combining, and slightly altering, validated instruments. Importantly, this study produced unique results. We are unaware of any literature investigating PTSD specifically for veterans who have experienced the IDES. This is an important, and large, subgroup that deserves attention.

Future Research

While the size of our sample was small, it did produce meaningful results. Further research with this survey instrument on a larger sample with a higher response rate has the potential to provide even more insight. Policymakers are aware of, and interested in, this research (123) so building on what has already been done in this study is warranted. Furthermore, a larger sample size would allow for further analysis of the two subgroups investigated here: women and Guard/Reservists. These two groups potentially will need more focus from policymakers so additional information about their experience would inform such efforts. Finally, it is clear that more research is needed about why certain individuals are not being adjudicated for PTSD when they test positive for the disorder.

Conclusion

This study clearly demonstrates that those with PTSD report more challenges with the IDES and continue to struggle once they leave the military as compared to those without PTSD. This is a large and important subgroup and this study provides policy options to address the needs of this population.

Dissertation Discussion

I chose to center this dissertation on the IDES because it is a critical public health policy that impacts thousands of United States service members as they transition out of the military and back into civilian life. Every single service member who medically transitions out of the military will go through the IDES. As we draw down troops with the end of the wars in Iraq and Afghanistan, this number is only going to grow. This dissertation provides an in-depth case study of the IDES. It is grounded in a conceptual model that reflects the policy cycle (figure 1.1, page 2). By approaching research on the IDES through the lens of the policy cycle, I sought to inform the literature about strategies to address a commonly noted divide between public health researchers and policymakers (62, 70), and in this way provide insight on how to close this gap. The three manuscripts that comprise the main content of the dissertation examine the IDES at distinct stages of the policy cycle. Through this approach, the dissertation illuminates the distinct portions of the cycle, informs researchers' understanding of the policy process, and identifies a role for them in this process.

The three aims that guided this dissertation were:

Study aim 1: With the assistance of the political science literature, identify and understand the political factors that influenced legislative support for the IDES.

Study aim 2: Apply CBPR principles to the IDES case to provide a model for better integrating research into congressional health policy formulation and, in doing so, inform development of a survey to evaluate the IDES experience that was relevant to congressional policymakers.

Study aim 3: Conduct a survey to evaluate the experience of the IDES process for veterans with PTSD compared to veterans without PTSD, based on previous research and the knowledge gained in Aim 2.

The goal of this Discussion chapter is to reflect on what was learned through each study aim and synthesize those findings across manuscripts. Through this process I will also develop policy recommendations and comment on the next steps for future research on this issue.

Manuscript 1

Aim 1 focused on the development phase of the policy cycle. I relied on lessons from the political science literature to better understand why the IDES received legislative support when so many other health policies have failed, and how this case could inform other public health policy efforts. Our political system is generally regarded as gridlocked and needlessly bureaucratic, but the IDES is an example of a policy that succeeded in garnering support despite these challenges.

I relied on key-informant interviews, document review, and media analysis to understand this case. Evidence from this research demonstrated that the *Washington Post* coverage of the deplorable conditions at Walter Reed Army Medical Center (9) created, in the words of John Kingdon, a "window of opportunity" (67). The Walter Reed scandal catalyzed the need for changes to the disability evaluation system. But timing alone was not sufficient; it also required an appropriate legislative vehicle. As political scientists Adler and Wilkerson point out, the majority of legislative attention is focused on passing authorizing legislation (68). This lesson clearly also applies to the IDES. Interview data from this dissertation reveal that those involved with the IDES recognized the opportunity of the National Defense Authorization Act (NDAA) as "must pass legislation" and chose to attach the pilot authority for IDES to it and thus ensure its passage. Finally, the social perception of

veterans also aided in the legislative support for the IDES. Veterans fall into the "advantaged" group, as described by Schneider and Ingram (4). Politicians did not want to be perceived as ignoring the problems of this advantaged group and thus are amenable to passing legislation to help them. This is especially true when there is negative attention associated with policies impacting this group, as was the case with the Walter Reed scandal.

The political science literature supported several lessons learned from this case: 1) Timing is vital. Public health researchers must be prepared with policy solutions to problems in order to take advantage of windows of opportunity. In this case, there had been efforts to improve the disability system prior to the IDES but they had not been successful. Those familiar with the problem recognized the Walter Reed scandal as a "window of opportunity" and took advantage of it. 2) Public health researchers should understand the authorization process, and use it to their advantage. The results from Manuscript 1 of this dissertation indicate that those familiar with the system recognized that the NDAA is legislation that passes every year and so they chose to utilize it to advance the IDES as opposed to attempting to pass stand alone legislation. 3) Public health researchers should capitalize on "advantaged" social construction when possible. In this case, veterans are an important group that is positively socially constructed and has the advantage of a powerful and well-organized lobby in Washington DC. This makes them important politically. Unfortunately, this is not always the case with populations of interest for public health researchers. If the population of interest to the researcher does not fall into an advantaged category, they should work with interest groups to improve the social construction of the group they seek to assist. By utilizing these lessons, public health researchers can help close the gap between research

and policymaking with the goal of advancing evidence-based policy to improve the public's health.

Manuscript 2

In manuscript two of this dissertation I endeavored to go one step further than in the first manuscript: I went beyond understanding how public health researchers may use lessons from the political science literature to advance policy, and sought to discover if it was possible, and how, to collaborate with policymakers to produce research that is responsive to their needs. I also was interested to learn if engaging directly with policymakers aided in the understanding of the political context surrounding a public health issue, as this knowledge could also help to advance research. To accomplish this, I used a CPBR framework and I was guided by the seven CBPR principles discussed in the Introduction of this dissertation (90). This manuscript focused on the assurance phase of the policy cycle.

I demonstrate in the second manuscript that policymakers are not only willing to participate in the formative stages of research, but that they welcomed the opportunity to do so and, in this case, provided thoughtful and extensive input. Furthermore, they were able to give concrete recommendations for research: they indicated that they would like research that explores the specific stages of the IDES, the role of family in the IDES and how well those with PTSD are integrating back into civilian life. I integrated these recommendations into the third manuscript of this dissertation. This willingness to participate may be understood in terms of policymakers' perceptions of academia. Interviewees described researchers in general and academia in particular as "credible," unbiased sources of information, and welcomed input from academia into the policymaking conversation. Several interviewees

even expressed a desire for more access to academia than they currently have. These same participants noted that they currently do not have access to academia. However, participants stressed that research findings should be conveyed in a concise, concrete format that can be understood quickly and easily, and to not rely on a journal format to do this. Interviewees consistently described journal articles as too detailed and confusing and cited a lack of training to be able to understand them. The consensus among interviewees was that access to more academic research would benefit the policymaking process. It was also clear that in order to do this, researchers have to recognize the entire community as a unit of identity and make sure to speak with people external to Congress and from both political parties. This was a vital step in navigating the political context around the issue. It was also clear that for direct engagement with policymakers to produce policy changes, a researcher must make a long-term commitment to the collaboration.

Applying the CPBR framework to the policymaking community provides a viable avenue for researchers to engage with the policymaking process. The results of this study show that there is clearly space for researchers in the congressional policymaking process that is currently not being filled. Researchers have a unique opportunity, and perhaps even a responsibility, to engage in research in a way that can inform policymaking. The long-term relationships established through the CBPR approach can facilitate such dissemination efforts (80).

Manuscript three

Manuscript three, which incorporated the assurance and the assessment phases of the policy cycle, built on manuscript two by incorporating the feedback from interviewees into a survey fielded with veterans. The survey included a sample of veterans with PTSD and a

sample of veterans without PTSD. The main goal of this manuscript was to conduct formative research concerning the experiences with the IDES among veterans with PTSD compared to those without PTSD. Three aspects of the IDES experience that policymakers provided input on, which were incorporated into the survey, include: 1) having detailed information about each phase of the process; 2) knowing whether families' were invited into the IDES process so that they could support a transitioning service member better; and 3) understanding how veterans diagnosed with PTSD who have been through IDES are fairing as civilians.

This study focused on exploring if those with PTSD had a worse experience in four study domains: 1) level of satisfaction with the IDES and those assigned to help them navigate the IDES; 2) understanding of the IDES process; 3) length of time to complete the different stages of the IDES; and 4) how those with PTSD are adjusting to civilian life post-IDES. In three of the four domains, respondents with PTSD had a statistically significantly worse experience than those without PTSD. The only domain where there was not a statistically significant difference was the understanding domain. In particular, Case Managers rated worse for those with PTSD in the sample. They also were less informed in the Medical Evaluation Board (MEB) process than those without PTSD. Those with PTSD also indicated that their families were not invited into the process at the same rate as those without PTSD. Finally, my survey included the four-question screening tool to assess if participants had PTSD. A large portion of the sample screened positive for PTSD but did not self-identify as having been adjudicated for PTSD. This potentially means they were either unaware that they had PTSD or they are not receiving disability benefits for their condition. This is concerning as it indicates that some individuals who have PTSD are likely missed by

the system. This is particularly troublesome because the long-term impacts of PTSD for those who do not receive care can be devastating for service members, their families, and their communities (29, 30, 33, 34).

Synthesizing the results

Through a case-study approach, we were able to highlight each stage of the policy cycle in the context of IDES – a significant veterans' health policy initiative with implications for veterans' health and wellness. The findings from this work will add to the current literature about how researchers can effectively engage in the policy process to improve the public's health. For example, manuscript 3 (the assessment phase) highlighted possible differences in the IDES experience between those with PTSD and those without PTSD and informed policy recommendations, which I and other researchers can use to engage with policymakers in the development phase of the process. Manuscript 1 identifies *how* researchers might engage in the policy development phase by applying lessons from political science to the IDES case. As detailed in manuscript 2, the relationships I established by using a CBPR framework helped to establish me as a resource on IDES and veterans health within the policymaking community (60). As such, I have begun a relationship in which I am an academic with expertise in the IDES, a position that will help me engage in both the policymaking phase of the cycle and the implementation aspect of the assurance phase of the cycle. Together these stages create a holistic picture of the policymaking process, providing the context needed to better understand an issue and how it can be advanced through the policy process, how we can more effectively work with policymakers at the formative stages of research, and how to execute that research.

Bringing the three manuscripts together into one cohesive document demonstrates the perspective that is gained by looking at health policy in the context of the policy cycle. This has implications for the way that we conduct research and leads to several policy recommendations.

Policy Recommendations

Recommendations to Bridge the Researcher-Policymaker Divide:

Manuscript two demonstrated that academia holds a special position among policymakers. Interviewees for this case study described how having academic research helped to politically bolster their position and how research from a reputable academic organization was perceived as more "credible" and less biased than other sources of research such as what they received from VSOs and governmental agencies. Researchers have an opportunity, and perhaps even a responsibility, to engage with policymakers to advance the public's health. To facilitate this process, such exchanges should be institutionalized. Academic institutions should provide support for public health researchers to engage in the political system and become part of policymaking communities (60). Toward this end, academic institutions could grant faculty the flexibility to spend time in Washington, D.C. or state capitals to establish the relationships needed to integrate into these communities, and encourage such practices. Most academic institutions have a congressional affairs office. Staff in this office can be responsible for learning about the research being conducted internally and helping researchers engage with the policymaking process.

Academic institutions value the peer-reviewed literature as a means of disseminating research. Academic appointments and promotions are based in part on an

individual's publication record. This study confirms what other researchers have already demonstrated (73): policymakers do not read the peer-reviewed literature. In order to engage with policymakers and advance the public's health through policy interventions, researchers need to engage directly with policymakers. Leadership at academic institutions seeking to encourage engagement with policymakers should consider other publication formats to achieve dissemination goals and consider other publications besides just the peer-reviewed literature when making hiring and promotion decisions.

For researchers to engage in the policymaking process, long-term funding is also required. This dissertation demonstrates how using a CBPR framework and building relationships has enormous potential. However, it is difficult to engage in a CBPR framework without the time the framework requires (77). Funding sources should be established to allow researchers the time needed to engage with the policymaking community using a CBPR approach.

Public health programs also need to offer, or even require, basic political science and advocacy classes for their students. As has been demonstrated in this dissertation, engaging in the policy cycle is a viable way to disseminate research to policymakers, and potentially improve the public's health. Such engagement is greatly facilitated if a researcher understands the political landscape. Changing public health education to include such training has the potential to increase engagement by public health researchers in the political process. CBPR training should also be expanded to include policymakers as a potential community of interest.

While this dissertation also demonstrates that a CBPR framework is a useful tool when working with policymakers, more research is needed in this area. While a CBPR

framework was successful for a veterans' health issue, it is still unknown if it would work with a more divisive health policy issue, such as outcomes based payment systems for physicians. CBPR should be examined using other health policy cases to assess whether it is applicable more broadly.

While this research built on what was known about how best to convey research to policymakers (73), we do not have a clear picture of what health policy literature gets consumed by policymakers. This study involved a small sample and explored a single, targeted issue. A survey that includes a large number of policymakers and asks about a range of issues may provide insight into this question.

Recommendations to Improve the IDES:

The third manuscript in this dissertation provides policy recommendations for the IDES specifically. In aim 2 we found that policymakers were especially concerned about how well the family was integrated into the transition process, how well those with PTSD were fairing post-IDES, and how the specific pieces of the IDES were functioning (116). Those with PTSD in the sample indicated that their families were not included in the disability evaluation process more often than those without PTSD. This result suggests a need to involve family members of those with PTSD in the IDES, and is a focus policymakers may want to address. Case Managers and PEBLOs are supposed to meet regularly with the service member to discuss his or her case. Addressing the issue with family members being included in the process could be as simple as requiring Case Managers and PEBLOs to formally invite family members to attend these meetings and collecting family members' contact information so they can be invited to future meetings.

One area of the IDES that stood out as needing attention by policymakers was Case Workers. The results from manuscript 3 show that those with PTSD are less satisfied with Case Workers compared to those without PTSD. Providing Case Workers with additional mental health training to work more effectively with those with PTSD is one solution that may help to alleviate this disparity (131). Policymakers should explore funding for this kind of training.

The results from manuscript 3 also demonstrate that the VA claims process is an area that may need attention. Manuscript two demonstrated that the policymakers interviewed were concerned that staff shortages had slowed the IDES and this appears to be particularly true for PTSD patients in the sample. One issue interviewees spoke about is the time needed to train VA claims specialists and the staff shortage in the VA. One potential solution is for policymakers to fund DoD claims specialists to be detailed to the VA until the IDES backlog is cleared.

One specific area of concern that the results show is that while just 58% of the sample self-identified as having been adjudicated for PTSD, 75% of the sample screened positive for PTSD using the military's four question screening instrument (out of the 74 people who completed the four-question screen). While an evaluation by a psychiatrist is the gold standard for establishing PTSD, this is still concerning as it suggests the system is either missing these individuals, or they are not receiving a PTSD adjudication for some other reason. This is particularly troubling as disability benefits can greatly improve the lives of those with PTSD (44, 46). One way to address this problem would be to hire more mental health care workers. There is a noted shortage of health care workers in the military (54) but a potential solution, which has already proven effective in other settings (131), is to focus more

attention on training lay people to do some evaluation and treatment tasks. However, this would require financial and logistical support from policymakers.

These policy recommendations are both broadly focused on bridging the divide between policymakers and researchers and more narrowly focused on specific ways to potentially improve the IDES for those with PTSD. This scope reflects the conceptual model for this dissertation and serves as a demonstration of how varied recommendations can be from engaging in research that embraces the policy cycle.

Strengths and Limitations

Both the first and the second study aims employed qualitative methods. As with all qualitative research, interviewer and interviewee bias was a concern (119). I minimized this by triangulating my results; I included interviewees with different perspectives and from different organizations (81, 105). The IDES is a politically sensitive topic because veterans are a politically important group (4), so some participants may have been unwilling to disclose certain information, or may have responded with a political answer that was not responsive to the study aims. I informed participants I would not share identifying information, which may have allowed them to share sensitive information.

Despite the limitations of qualitative research, there are also a number of strengths associated with these methods. The flexibility and responsive nature of qualitative methods allowed me to collect and incorporate unexpected, yet relevant, information (81). There is an established track record of ethnography being used successfully with policymakers (120), and this study furthers those efforts in the literature. This study,

which embraces a CBPR framework, would not have been possible without the flexibility that qualitative methods afford.

Manuscript three was limited by the size of the sample and the response rate. I made every effort to recruit a large sample size including partnering with a VSO that had an established track record of conducting successful survey research, holding the survey open for a full six weeks, repeatedly following-up with individuals who did not respond, and beta-testing my survey to ensure it was easy to navigate. I also attempted to target the survey correctly by choosing an organization that was comprised exclusively of injured or ill veterans (thereby increasing the chances that they were medically separated) and limiting the sample to people who had joined the organization after the establishment of the IDES. Despite this, only 177 out of 986 people who received an invitation to participate began the survey and just 80 of these met the survey criteria.

While every effort was taken to draw a stratified random sample that included identifying a target demographic, composition of the sample, and drawing a random sample that met those criteria, there is still potential for response bias as a result of the low response rate. I also was drawing a sample from a VSO which meant that the veterans I was accessing were already more prone to be involved in the veterans' community and potentially advocacy on behalf of veterans and therefore do not reflect the general veterans population as I would like ideally. This also impacts response bias because the people who responded may be involved with an advocacy organization because they had such a bad transition experience. Furthermore, I was limited in the analysis I could conduct because of the small sample.

Despite this, the demographic composition of respondents closely reflected the demographics of those that become sick or injured as a result of their service (99).

Furthermore, my research built on previous research that had been conducted about the military's disability system and the instrument was developed using established measures and involved individuals within the policy-making community familiar with IDES. Finally, veterans who had experienced the IDES tested the instrument.

As for the dissertation overall, several aspects strengthened the results. For instance, the mixed methods approach allowed me to use the method best suited to each study aim. Most importantly, perhaps, is that each manuscript filled a gap in the literature. There is limited research demonstrating how lessons from the political science literature can be applied to public health issues (65, 66). The first manuscript addressed this deficit and provided important insights for applying lessons in the future. In the second manuscript, I applied CBPR principles to engage a population (policymakers) that has not yet been explored in the CBPR literature. This approach was successful and offers a mechanism for closing the gap between research and policy. Finally, in the third manuscript, the survey produced a novel contribution. There is no literature investigating PTSD specifically for veterans who have experienced the IDES. This is an important, and large, subgroup that deserves attention.

Further Research Stemming from this Dissertation

While I have touched on some future research in the policy recommendations section of this discussion, those recommendations are more general and intended to add to the body of literature about bridging the divide between practice and policy. It is clear from the limitations section of this Discussion chapter that there are areas for future research stemming directly from the research that comprises this dissertation. Foremost, it will be important to determine if the CBPR approach translates into actual policy changes, meaning, will the

recommendations from aim 3 be considered and incorporated into IDES, reflecting the cycling back to the policy development phase of the policy cycle. Further qualitative research with policymakers about their reaction to the findings from study aim 3 will be vital to understanding this. If the recommendations from aim 3 are incorporated into new policy, it will be important to identify if the same lessons from the political science literature learned in manuscript 1 hold true again. Further qualitative research, similar to what was conducted in manuscript 1, will be needed to determine this. It would also round out this body of literature to test another veterans' health policy case in a similar manner to what was conducted in this dissertation.

The research in manuscript 3 would also benefit from a larger response rate. Fielding the survey again with a better-targeted sample, the kind of sample that was not possible while working with a VSO but would be possible working directly with the VA, would allow me to extend my analysis and yield more robust findings. The literature demonstrates that women and National Guard/Reservists are important subgroups that experience PTSD and the disability system differently than their counterparts (24-27, 40, 42). I lacked a sufficient sample size to obtain statistically significant differences for PTSD vs. no PTSD in these groups but exploratory analyses demonstrated those with PTSD may be having a harder time with the system and adjusting to life after the military than those without PTSD.

A larger sample size would also allow for further exploration of differences between those that self-identify as having PTSD and those that screen positive for PTSD. The results of manuscript 3 show that there is a large proportion of people who do not self identify as having PTSD but screen positive. With a larger sample size it would be possible to better understand how this group is faring relative to those that self-identify as having PTSD and

what components of the IDES are of concern. Qualitative research is also warranted to help determine why these individuals may be missed under the current system. Interviews with those who test positive but do not self-identify may reveal barriers to obtaining a PTSD adjudication.

Conclusion

This dissertation is focused on bridging the divide between research and policy. I drew on a diverse body of literature and employed several different methods to accomplish the three study aims. By demonstrating that it is possible to engage in the political process as a researcher, I hope this work will encourage other public health researchers to also view the political process as a viable avenue for advancing the public's health.

Appendices

Appendix A. Full DSM-V definition of PTSD

Posttraumatic Stress Disorder

- **Note:** The following criteria apply to adults, adolescents, and children older than 6 years.

A.
xposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as it occurred to others.
3. Learning that the traumatic event(s) occurred to a close family meml close friend. In cases of actual or threatened death of a family memb friend, the event(s) must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

- **Note:** Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

B.
resence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

- **Note:** In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).

- **Note:** In children, there may be frightening dreams without recognizable content.

3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)

- **Note:** In children, trauma-specific reenactment may occur in play.

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

C.
ersistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as

evidenced by one or both of the following:

1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

D.

egative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).
2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous," "My whole nervous system is permanently ruined").
3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.
4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).
5. Markedly diminished interest or participation in significant activities.
6. Feelings of detachment or estrangement from others.
7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

E.

arked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.
2. Reckless or self-destructive behavior.
3. Hypervigilance.
4. Exaggerated startle response.
5. Problems with concentration.
6. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.

G.

he disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H.

he disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.

Specify whether:

- **With dissociative symptoms:** The individual's symptoms meet the criteria for posttraumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

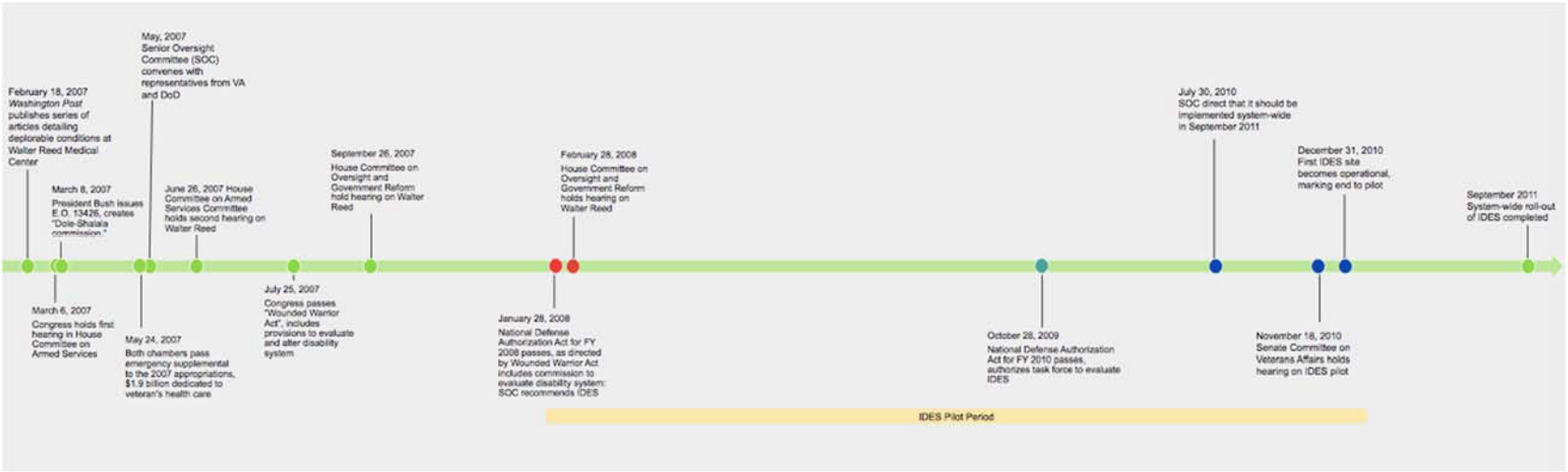
1. **Depersonalization:** Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. **Derealization:** Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

- **Note:** To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

Specify if:

- **With delayed expression:** If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

Appendix B. Timeline of events that led to the rollout of IDES to the entire military



Appendix C. Interview Guide

1.Tell me about your position here? (staff) Tell me why you ran for congress? (member)

2. Do you have any experience with IDES?

a. from your perspective, how is IDES impacting the veterans benefits process?

3. Can you explain the events that precipitated the advent of the IDES?

a. Who were the political players involved? Committees?
b. What impact do you think they have had?
c. What made these events significant enough for IDES to receive support?

4. What information helped to make legislative decisions about the IDES?

a. Was there research that proved to be informative?
b. What was this research?
c. Why was IDES successful when other pieces of legislation are not successful?

5. How was mental illness considered when creating the IDES?

a. What would you like to know about how the IDES is impacting specific groups (e.g., individuals with PTSD)?
b. Are you interested in how IDES impacts particular populations (e.g., individuals with PTSD)?

6. Going forward, what would you like to know about the implementation of the IDES?

a. What is not working?
b. Do you have ideas as to how to make the process work better?
c. What questions specifically do you have about the impact of the IDES on people's transition?
a. What can researchers do to help policy-makers refine the IDES?

7. Is there any information about Warrior Transition Units that might be useful to you and what would that be?

a. What aspects of the culture of the WTU's would be useful to you when making policy decisions?

8. Shifting away from the IDES specifically, what do you think of academic research centers?

a. Are there opportunities that are missed by researchers?

9. What kind of role do you think there is for a researcher to inform policy-making?

a. What type of relationship do you have with researchers?
b. What extent do you consult researchers when you are making policy?
c. Who do you consult?

Appendix D. Codebook for Aims 1 and 2

Code	Definition
1.0 Relationship to Academia and research	The way in which participants view or interact with academia and research.
1.2 Position of Academia	The way that academia is positioned within the policymaking community and this position changes their interaction with policymakers and the policy debate.
1.3 Relationship with Academia	The types of relationships that currently exist with policymakers and Academia.
1.4 Types of information	The different forms of information that policymaker rely on when they are making policy decisions. How their views of this information differ.
1.5 Positive views of Academia	Words used to describe academia that convey respect such as "credible" and "unbiased"
1.6 Negative views of Academia	Problems collaborating with academia, or potential problems. Challenges of interpreting research.
1.7 Access to research/academia	Current access to academics
1.8 Reporting research	Ways that research is currently reported. What works and what doesn't. How they would like research reported.
2.0 Working with Federal Agencies	How people work with Federal Agencies. The tensions that exist and how people navigate that tension.
2.1 DoD	What it is like to work with the DoD and their role in the policymaking process.
2.2 VA	What it is like to work with the VA and their role in the policymaking process.
2.3 Backlog	Problems with the disability claims backlog.
2.4 Culture of the DoD	The culture of the DoD and the role that has in disability and disability adjudication.
2.5 Dole-Shalala	The way that the Dole-Shalala survey was conducted. Who was involved. How they were involved. Why it happened. How the report was used.
2.6 Electronic Medical Records (EMR)	Issues with the transition to EMR and the political situation surrounding the issue.
3.0 The IDES	How the IDES is functioning now and politically, how the IDES is viewed.
3.1 Problems with the IDES	Problems that policymakers are focused on with the IDES.
3.2 Missing information	The issue of information and how it gets lost in translation within the IDES.
3.3 Mental Illness	How policymakers when discussing the IDES view mental illness. Issues with the IDES related to mental illness.

3.4 Walter Reed	The Walter Reed scandal and the role it played in the support for the IDES.
4.0 The political process and IDES	Descriptions of how the IDES navigated the political process. Pieces of the process that can be leveraged. How the process functions.
4.1 Appropriations and Budget	How the appropriations process works. How budget decisions are made.
4.2 Congressional action	Congressional actions that took place in order to accomplish the IDES.
4.3 Congressional Committees	The role of Congressional committees in support for the IDES. Which committees were active and when and why.
4.4 Policymaking and information	The types of information that are consumed when making policy decisions.
4.5 NDAA	The NDAA and the role the legislation played in passage of the IDES pilot. The role of the NDAA in policymaking generally.
4.6 Political players	Who was involved in the move to IDES. Why these people were involved. How their involvement changed the ultimate solution.
4.7 Role of Congress	The role that congress plays in a major change like this between two agencies. Their role now that they are the oversight body. How Congress can influence veterans' legislation.
4.8 Veterans Service Organizations	The role of VSO's in the policymaking process. Which groups are influential and why.
5.0 Information that policymakers would like	Information of the IDES that policymakers do not have but, they would like research on these topics in order to help them make policy changes
5.1 Coordination	Aspects of coordination of the process that policymakers are interested in.
5.2 PEBLOs	Issues with PEBLOs
5.3 Case Managers	Issues with Case Managers
5.4 Satisfaction	Aspects of satisfaction policymakers are interested in.
5.6 Accuracy	Issues related to accuracy of claim adjudication with the IDES
5.7 Length of Process	Concerns with how long the process takes.
5.8 Understanding	Concerns about how well people understand the IDES.
5.9 Barriers	Specific barriers to completing the IDES that concern policymakers.
5.10 How to administer the survey	Feedback from policymakers on how to best implement a survey and how that implementation may translate into helping them make new policy. For instance, timing of the survey.
5.11 Mental illness and the IDES	Specific concerns with the IDES and mental illness.
5.12 Warrior Transition Units and the IDES	Concerns about how well the IDES and Warrior Transition units are meshing.
5.13 Transitional resources	Questions about transitional resources and how well those resources are functioning.

5.14 Family	Questions about family and the IDES.

Appendix E. Survey Instrument

Do you want to help other veterans? Do you want to help improve the disability system? By participating in this survey you are doing a service to the men and women who come after you. We are researching the experience of veterans who have been evaluated for disability in the new Integrated Disability Evaluation System (IDES) so that we can help make the system better. But we need your help. We need you to fill out this survey.

The entire survey will take less than 30 minutes. The success of the study depends on getting as high a participation rate as we possibly can so your participation is much appreciated. We need to know your opinions regardless of your experience.

Researchers at the Johns Hopkins School of Public Health, in cooperation with the Wounded Warrior Project, are conducting this survey. We will keep any information you provide in the survey confidential. Your name, phone number, and address will never be collected as part of this survey. Your decision to participate in the study, as well as your individual responses to all questions, will not be shared with the US Military or Department of Veterans Affairs. Participation is completely voluntary and you can stop the survey at any time. There are some questions that you could potentially find upsetting but you may also skip any questions that you do not wish to answer. By advancing to the next page, you are agreeing to participate in the survey.

Thank you in advance. Your participation will help us make recommendations for ways to improve the system for those who come after you!

You and Your Background

We will begin by asking you a few questions about you and your background. Again, no information that would make it possible to identify you will be collected and all of your answers will be confidential.

1. Have you separated from, or are you in the process of separating from the armed forces?
   Yes 1
   No 2
   REFUSED.....-7
   DON'T KNOW.....-8

   (if answer no, prompts script thanking them for their time)

2. Did you, or are you in the process of receiving a medical separation from the military?
   Yes 1
   No 2
   REFUSED.....-7
   DON'T KNOW.....-8

   (if answer no, prompts script thanking them for their time)

3. Did you, or are you in the process of receiving your medical discharge before the end of your service agreement?
   Yes 1
   No 2
   REFUSED.....-7
   DON'T KNOW.....-8

   (if answer no, prompts script thanking them for their time)

4. Did you begin the separation process after January 1, 2012?
   Yes 1
   No 2
   REFUSED.....-7
   DON'T KNOW.....-8

   (if answer no, prompts script thanking them for their time)

5. What is the highest level of school you have completed?

   Some high school, but no diploma..... 1
   High school diploma or GED 2
   Vocational school, some college or 2 year degree 3
   College degree, 4 year degree..... 4
   Professional or graduate degree..... 5
   REFUSED.....-7
   DON'T KNOW.....-8

6. What was your military status when you received your wound or injury?

   Active ordered Guard or Reserve Component..... 1
   Active Component 2
   REFUSED.....-7
   DON'T KNOW.....-8

7. What is your current marital status? Are you...

   Married,..... 1
   Living together but not married, ... 2
   Separated, divorced, widowed, or..... 3
   Single, never been married?..... 4
   REFUSED.....-7
   DON'T KNOW.....-8

8. Are you Spanish/Hispanic/Latino?

   Yes, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban, or other Spanish/Hispanic/Latino.....1
   No, not Spanish/Hispanic/Latino 2
   REFUSED.....-7

9. What is your race? You can say "yes" to one or more races to indicate what you consider yourself to be

White..... 1
Black or African American,..... 2
American Indian or Alaska Native 3
Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese) 4
Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, Chamorro) 3

REFUSED.....-7

10. Which of the following best describes where you live now? Are you living in...

Civilian housing that I own or pay mortgage on.. 1
Civilian housing that I rent 2
With family or friends..... 3
Military Housing..... 4
Other 5
REFUSED.....-7
DON'T KNOW.....-8

11. What would you say best describes what you have being doing for the majority of your time over the past month? Have you been…

Working 1
Laid off//looking for work 2
Going to school..... 3
Taking care of your house/family 4
Participating in rehabilitation..... 5
Other 6
REFUSED.....-7
DON'T KNOW.....-8

12. Have you ever (or are you currently) spent time in a Wounded Warrior Battalion, Wounded Warrior Regiment, Wounded Warrior Unit or Warrior Transition Unit?

Yes 1
No 2
REFUSED.....-7
DON'T KNOW.....-8

Disability Process-MEB

The next several questions are about the disability evaluation process. Just to remind you of how the process is supposed to work, you first go through the **Medical Evaluation Board (MEB)**. During the MEB you meet with doctors and they determine if there is a

condition that may *potentially* make you unfit to serve in the military, but the MEB does not decide if you will separate from the military.

You are then referred to the **Physical Evaluation Board (PEB)**. The PEB makes the final determination if you are going to continue in the military or if you are going to separate for medical reasons. You also receive a disability rating from the Department of Veterans Affairs (VA) during the PEB process. The PEB stage of the process is also when you have a chance to appeal the decision to discharge you. You also have chance to appeal the level of disability that has been assigned to you.

After you complete the PEB, you **file a claim with the VA** and you should receive a letter from the Department of Veterans Affairs informing you of your benefits within 30 days of your separation from the military.

The next several questions are about the **Medical Evaluation Board (MEB),** the first part of the process described above.

13. Please indicate at what level you agree with the following statement: I was kept informed of the status of my evaluation by the MEB

    Strongly agree 1
    Agree 2
    Neither agree nor disagree 3
    disagree 4
    strongly disagree 5
    REFUSED ..... -7
    DON'T KNOW ..... -8

14. How easy was it for you to get medical records needed for your disability evaluation as part of the MEB? Was it...

    Very easy, ... 1
    Somewhat easy, ... 2
    Neither easy nor difficult, ... 3
    Somewhat difficult, or 4
    Very difficult? 5
    REFUSED ..... -7
    DON'T KNOW ..... -8

15. As part of the MEB, were you asked to resubmit any records or documents that you (or someone helping you) had already provided?

    YES 1
    NO 2
    REFUSED ..... -7
    DON'T KNOW ..... -8

16. How long was the time from when you began the MEB until you received the result?

    Weeks ..... _____
    Months ..... _____

Have not received results 1
REFUSED ..... -7
DON'T KNOW ..... -8

17. How well did you understand the MEB process? Would you say...
Completely, ... 1
Mostly, ... 2
Somewhat, or 3
Not at all? 4
REFUSED ..... -7
DON'T KNOW ..... -8

18. Compared to what you expected, do you think the MEB process was…
Much longer, ... 1
Somewhat longer, ... 2
About what you expected, ... 3
Somewhat shorter, or 4
Much shorter? 5
REFUSED ..... -7
DON'T KNOW ..... -8

19. How well did you understand the MEB process? Would you say...
Completely, ... 1
Mostly, ... 2
Somewhat, or 3
Not at all? 4
REFUSED ..... -7
DON'T KNOW ..... -8

20. Please indicate which level you agree with the following statement:

The MEB process was fair.
Strongly agree 1
Agree 2
Neither agree nor disagree 3
Disagree 4
Strongly disagree 5
REFUSED ..... -7
DON'T KNOW ..... -8

The final MEB determination was fair.
Strongly agree 1
Agree 2
Neither agree nor disagree 3
Disagree 4

Strongly disagree 5
REFUSED.....-7
DON'T KNOW.....-8

As part of the MEB you are supposed to meet with a physician to examine you and help determine your fitness to serve. This may have been a single visit or multiple visits

21. Was this physician (or physicians)…

From the VA 1
From the Department of Defense..... 2
An independent contractor working for the VA or military 3
Other 4
REFUSED.....-7
DON'T KNOW.....-8

22. Indicate the level at which you agree with the following statements:

When you met with the clinician (or clinicians) for your MEB exam	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Refuse
a. I was taken to the exam room in a reasonable time	1	2	3	4	-7	-8
b. Office staff at a doctor's office or clinic treated me with courtesy and respect	1	2	3	4	-7	-8
c. The office staff at a doctor's office or clinic was helpful as I thought they should be	1	2	3	4	-7	-8
d. The doctor (or other health care provider) listened carefully to me	1	2	3	4	-7	-8
e. The doctors (or other health care providers) explained things in a way that was easy for me to understand	1	2	3	4	-7	-8

Disability Process- PEB

The next several questions are about the **Physical Evaluation Board (PEB)**. Just to remind you, the PEB makes the final determination on if you are going to continue in the military or if you are going to separate for medical reasons. You also receive a disability rating from the Department of Veterans Affairs (VA) during the PEB process. The PEB stage of the process is also when you have a chance to appeal the decision to discharge you. You also have chance to appeal the level of disability that has been assigned to you.

23. Please indicate the level at which you agree with the following statement: I was kept informed of the status of my evaluation by the PEB

    Strongly agree 1
    Agree 2
    Neither agree nor disagree 3
    disagree 4
    strongly disagree 5
    REFUSED ..... -7
    DON'T KNOW ..... -8

24. How easy was it for you to get your service and medical records needed for your disability evaluation as part of the PEB?

    Very easy, ... 1
    Somewhat easy, ... 2
    Neither easy nor difficult, ... 3
    Somewhat difficult, or 4
    Very difficult? 5
    REFUSED ..... -7
    DON'T KNOW ..... -8

25. As part of the PEB, were you asked to resubmit any records or documents you (or someone helping you) had already provided?

    YES 1
    NO 2
    REFUSED ..... -7
    DON'T KNOW ..... -8

26. How long was the time from your referral from the MEB until you received the result of the PEB?

    Weeks ..... _____
    Months ..... _____
    Have not received results 1
    REFUSED ..... -7
    DON'T KNOW ..... -8

27. Compared to what you expected, do you think the PEB evaluation process took...

    Much longer, ... 1
    Somewhat longer, ... 2
    About what you expected, ... 3

Somewhat shorter, or 4
Much shorter 5
REFUSED ..... -7
DON'T KNOW ..... -8

28. How well did you understand the PEB process? Would you say...
Completely, ... 1
Mostly, ... 2
Somewhat, or 3
Not at all? 4
REFUSED ..... -7
DON'T KNOW ..... -8

29. Did you, or do you plan to, appeal the decision by the PEB?
Yes ..... 1 → GO TO 29
No 2
REFUSED ..... -7
DON'T KNOW ..... -8

30. Did you seek legal assistance from a military lawyer for your appeal to the PEB?
Yes 1
No, I did not seek legal assistance 2
No, I was unable to get a lawyer to help me 3
REFUSED ..... -7
DON'T KNOW ..... -8

31. Please indicate which level you agree with the following statements:

a. The PEB process was fair.
Strongly agree 1
Agree 2
Neither agree nor disagree 3
disagree 4
strongly disagree 5
REFUSED ..... -7

b. The final determination by the PEB fair.
Strongly agree 1
Agree 2
Neither agree nor disagree 3
disagree 4
strongly disagree 5
REFUSED ..... -7

Assistance with Process

We are now going to ask you some questions about the people assigned to help you with the disability evaluation process. As you go through the entire process you are supposed to have a Physical Evaluation Board Liaison Officer (PEBLO) assigned to you. This person is the liaison between the Department of Defense and the Veteran's Administration. They are supposed to help you navigate the process and answer questions or concerns you may have.

32. Did you have a PEBLO assigned to you?

YES	1	
NO	2	→ GO TO 32
Other	3	→ GO TO 32
Don't remember	4	→ GO TO 32
REFUSED	-7	→ GO TO 32
DON'T KNOW	-8	→ GO TO 32

33. Does/did your PEBLO…

	Never	Sometimes	Usually	Always	RF	DK
a. Keep you informed about your case?	1	2	3	4	-7	-8
b. Treat you with courtesy and respect?	1	2	3	4	-7	-8
c. Help you as much as you thought he/she should?	1	2	3	4	-7	-8
d. Listen carefully to you?	1	2	3	4	-7	-8
e. Explain things in a way that was easy to understand?	1	2	3	4	-7	-8
f. Answer any questions you had about the process?	1	2	3	4	-7	-8
g. Compile all the materials you needed for your case to move forward with the disability evaluation process?	1	2	3	4	-7	-8

h. Clearly explain the outcome at each stage of the disability evaluation process?	1	2	3	4	-7	-8

As you go through the process, you may have had a **Case Manager** assigned to you. This person is supposed to work with your PEBLO and ensure you attend appointments, meetings and transition courses. The case manager may also be able to assist you in getting the necessary paperwork for your IDES case file and provide additional coaching on the IDES process by assisting you with questions you should ask your PEBLO and physicians.

34. Did you have a case manager assigned to you?

YES 1
NO ..... 2 → GO TO 36
Other ..... 3 → GO TO 36
Don't remember ..... 4 → GO TO 36
REFUSED ..... -7 → GO TO 36

35. Did your case manager…

	Never	Sometimes	Usually	Always	RF	DN
a. Keep you informed about your case?	1	2	3	4	-8	-7
b. Treat you with courtesy and respect?	1	2	3	4	-8	-7
c. Help you as much as you thought he/she should?	1	2	3	4	-8	-7
d. Listen carefully to you?	1	2	3	4	-8	-7
e. Explain things in a way that was easy to understand?	1	2	3	4	-8	-7
f. Answer any questions you had about the process?	1	2	3	4	-8	-7
g. Compile all the materials you needed for your case to move forward with the disability evaluation process?	1	2	3	4	-8	-7
h. Coordinate with your PEBLO to	1	2	3	4	-8	-7

ensure that your case moved smoothly?	1	2	3	4	-8	-7

As part of the disability evaluation process, you are supposed to be assigned a **Military Service Coordinator (MSC).** The MSC is a **representative from the VA** and their job is to serve as a resource for IDES participants and their families with regard to information about VA benefits.

36. Did you have a MSC assigned to you?

YES 1
NO ..... 2 → GO TO 38
Other ..... 3 → GO TO 38
Don't remember ..... 4 → GO TO 38
REFUSED ..... -7 → GO TO 38

37. Did your MSC…

	Never	Sometimes	Usually	Always	RF	DN
a. Give you information to help you understand VA claims process?	1	2	3	4	-8	-7
b. Treat you with courtesy and respect?	1	2	3	4	-8	-7
c. Help you as much as you thought he/she should?	1	2	3	4	-8	-7
d. Listen carefully to you?	1	2	3	4	-8	-7
e. Explain things in a way that was easy to understand?	1	2	3	4	-8	-7
f. Answer any questions you had about the VA claims process?	1	2	3	4	-8	-7
g. Coordinate with your PEBLO to ensure that your case moved smoothly?	1	2	3	4	-8	-7
h. Contact you before your		2	3	4	-8	-7

meetings to tell you what materials to bring?	1	2	3	4	-8	-7
	1					

38. Did someone outside of the military, such as a lawyer or a disability expert, help you at any point in the disability evaluation process?

YES 1
NO ..... 2 →GO TO 40
REFUSED ..... -7 →GO TO 40
DON'T KNOW ..... -8 →GO TO 40

39. Who helped you?

Veterans service organization representative 1
Lawyer 2
Other disability expert 3
Family member or friend 4
Someone else 5
REFUSED ..... -7
DON'T KNOW ..... -8

The VA

We are now going to ask you a few questions about the VA and its role in the process.

40. Have you, or someone else on your behalf, filed a disability claim with the VA?

YES 1
NO ..... 2 → GO TO 44c
REFUSED ..... -7 → GO TO 44c
DON'T KNOW ..... -8 → GO TO 44c

41. Do you plan to file a claim with the VA?

YES 1
NO 2
REFUSED ..... -7
DON'T KNOW ..... -8

42. How well do you understand the VA claims process? Would you say...

Completely, ... 1
Mostly, ... 2
Somewhat, or 3
Not at all? 4
REFUSED ..... -7
DON'T KNOW ..... -8

43. Did the VA ask you to resubmit any records or documents you (or someone helping you) had already provided?

YES 1
NO 2
REFUSED ..... -7
DON'T KNOW ..... -8

44. Please indicate the level at which you agree with the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Refuse
a. The VA kept me informed of the status of my claim	**1**	**2**	**3**	**4**	**-7**	**-8**
b. The VA evaluation process was fair.	**1**	**2**	**3**	**4**	**-7**	**-8**
b. The VA disability decision was fair.	**1**	**2**	**3**	**4**	**-7**	**-8**
c. I was well informed about the MEB evaluation processes before it happened.	**1**	**2**	**3**	**4**	**-7**	**-8**
d. I was well informed about the PEB evaluation processes before it happened.	**1**	**2**	**3**	**4**	**-7**	**-8**
e. I was well informed about the VA evaluation processes before it happened.	**1**	**2**	**3**	**4**	**-7**	**-8**

Final Decision and Appeals

We are now going to ask you a few questions about the final decision on your disability status.

45. What is the current status of your Final decision?

Received results	1	
Still pending	2	→ GO TO 49
Haven't submitted	3	→ GO TO 49
REFUSED	-7	→ GO TO 49
DON'T KNOW	-8	→ GO TO 49

46. Do you expect to appeal your final evaluation?

YES	1
NO	2
REFUSED	-7
DON'T KNOW	-8

47. How long did it take to get a decision on your rating from the VA?

Weeks	_____
Months	_____
Have not received a decision	1
REFUSED	-7
DON'T KNOW	-8

48. Did you receive a disability rating from the VA for… (check all that apply)

PTSD	1
Traumatic Brain Injury	2
Other mental illness	3
Physical injury	4
REFUSED	-7
DON'T KNOW	-8

49. Below is a list of different medical conditions service members and veterans may have. For each, please indicate if you received a disability rating from the VA for that condition.

	Yes (1)	No (2)
1. A traumatic brain injury (TBI)		
2. Tinnitus (ringing in the ears)		
3. Hearing loss		
4. Blindness		
5. Any amputated hands, arms, feet, or legs		
6. Paralysis or spinal cord injury		

7. Back pain
8. Limited motion or other impairment of the knee
9. Traumatic arthritis
10. Hypertensive vascular disease (hypertension or high blood pressure)
11. Cancer (any form, including leukemia, melanoma, etc.)
12. Diabetes
13. Multiple Sclerosis (MS)
14. Parkinson's disease
15. Dementia
16. Post-traumatic stress disorder (PTSD)
17. Major depressive disorder (Depression, clinical depression)
18. Substance use disorder
19. Other

50. Compared to what you expected, do you think the VA disability claims process takes ...

Much longer,	1
Somewhat longer,	2
About what you expected,	3
Somewhat shorter, or	4
Much shorter?	5
Have not received results	6
REFUSED	-7
DON'T KNOW	-8

51. What is your disability rating from the VA?

0%	0
10%	1
20%	2
30%	3
40%	4
50%	5
60%	6
70%	7
80%	8
90%	9
100%	10
Have not received results	11
REFUSED	-7
DON'T KNOW	-8

52. Was the rating you received...

A lower percentage than you expected, ... 1
About the percentage you expected, or..... 2
A higher percentage than you expected? 3
REFUSED.....-7
DON'T KNOW.....-8

Support for your Family during process
We are now going to ask you a few questions about how your family was treated during the disability evaluation process.

53. Please indicate the level at which you agree with the following statement:

My family was included in the disability evaluation process?

Strongly agree 1
Agree..... 2
Neither agree nor disagree 3
Disagree 4
Strongly disagree 5
REFUSED.....-7

Current Health Status

In the next few questions we are going to ask you about how you are feeling right now.

54. How often do you get the social and emotional support you need?

Always 1
Usually..... 2
Sometimes..... 3
Rarely.....-7
Never.....-8

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, in the past month, you:

55. Have had nightmares about it or thought about it when you did not want to?

Yes. 1
No..... 2
REFUSED.....-7

56. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?

Yes. 1

No..... 2
REFUSED.....-7

57. Were constantly on guard, watchful, or easily startled?

Yes. 1
No..... 2
REFUSED.....-7

58. Felt numb or detached from others, activities, or your surroundings?

Yes. 1
No..... 2
REFUSED..... -
7

59. In general, how satisfied are you with your life?

Very satisfied..... 1
Satisfied 2
Dissatisfied 3
Very dissatisfied 4
REFUSED.....-7

60. In general, would you say your health is...

Excellent 1
Very good 2
Good 3
Fair..... 4
Poor..... 5
REFUSED.....-7

61. Does your health limit you in moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf? Does your health now limit you a lot, limit you a little, or not limit you at all?

Yes, limited a lot..... 1
Yes, limited a little..... 2
No, not limited at all 3
REFUSED.....-7

62. Does your health limit you in climbing several flights of stairs? Does your health now limit you a lot, limit you a little or not limit you at all?

Yes, limited a lot..... 1
Yes, limited a little..... 2
No, not limited at all 3
REFUSED.....-7

63. During the past 4 weeks, how often have you accomplished less than you would like as a result of your health condition?

No, none of the time..... 1
Yes, a little of the time..... 2
Yes, some of the time 3
Yes, most of the time 4
Yes, all of the time..... 5
REFUSED.....-7

64. During the past 4 weeks, how often were you limited in the kind of work or other regular daily activities you do as a result of your health condition?

No, none of the time 1
Yes, a little of the time..... 2
Yes, some of the time 3
Yes, most of the time 4
Yes, all of the time..... 5
REFUSED.....-7

65. How much of the time during the past 4 weeks… did you have a lot of energy?

All of the time..... 1
Most of the time..... 2
A good bit of the time 3
Some of the time..... 4
A little bit of the time..... 5
None of the time 6
REFUSED.....-7

66. How much of the time during the past 4 weeks… have you felt downhearted and blue?

All of the time..... 1
Most of the time..... 2
A good bit of the time 3
Some of the time..... 4
A little bit of the time..... 5
None of the time 6
REFUSED.....-7

67. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

All of the time..... 1
Most of the time..... 2
A good bit of the time 3
Some of the time..... 4
A little bit of the time..... 5
None of the time 6
REFUSED.....-7

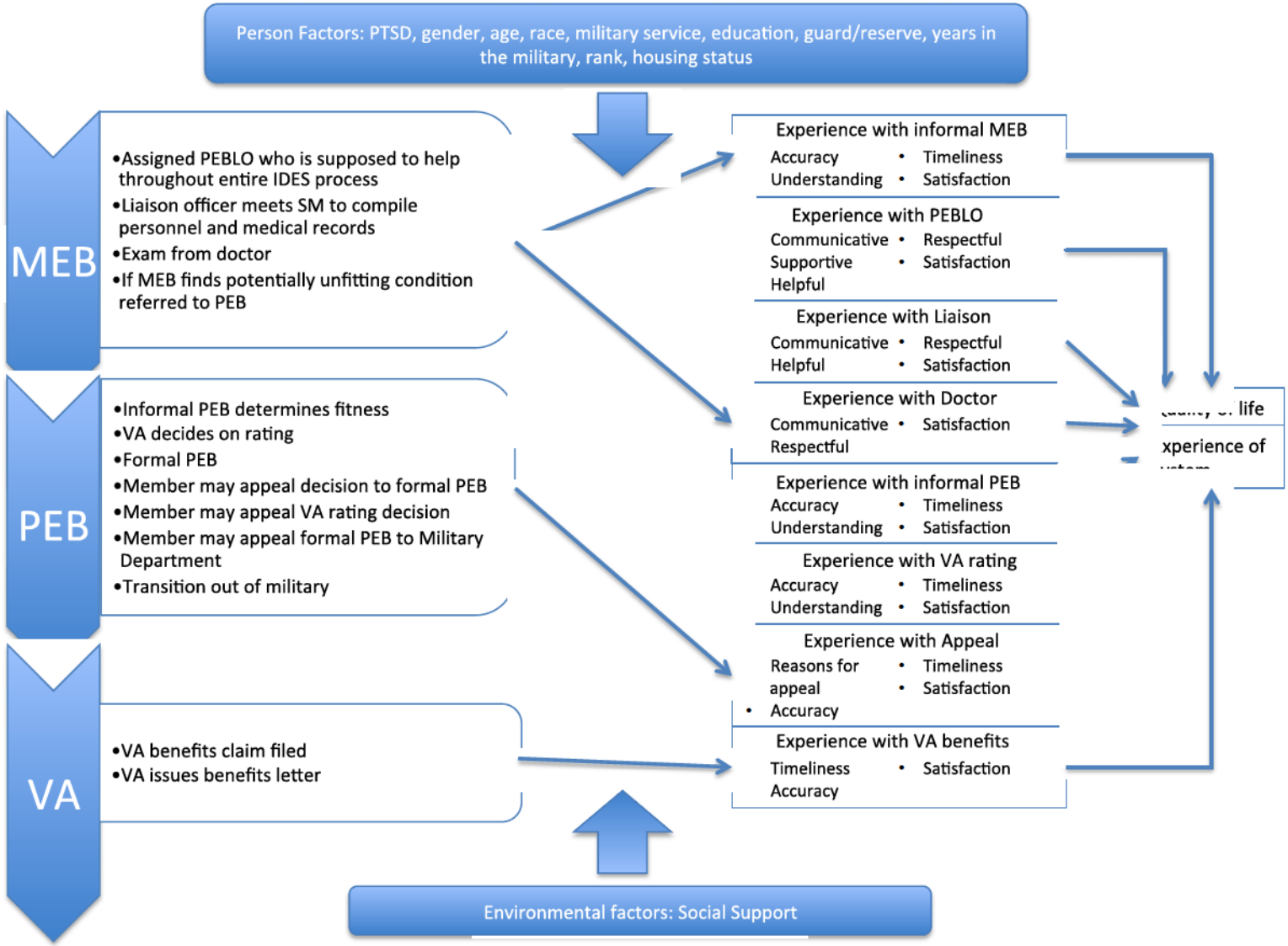
68. Compared to before the injury and/or illness(es) for which you received your disability status, how would you rate your physical health in general now?

Much better 1
Slightly better 2
About the same 3
Slightly worse 4
Much worse 5
REFUSED ..... -7

69. Compared to before the injury and/or illness(es) for which you received your disability status, how would you rate your emotional problems, such as feeling anxious, depressed or irritable, now?

Much better 1
Slightly better 2
About the same 3
Slightly worse 4
Much worse 5
REFUSED ..... -7

Appendix F. Conceptual model for Aim 3 Survey



Appendix G. Tables Related to Manuscript 3

Table 7.1. Univariate Analysis of PTSD vs. No PTSD: Satisfaction/Dissatisfaction, phases of the process

Question	***No PTSD***		***PTSD***		***total***	
MEB process	number	%	number	%	number	%
I was kept informed of the status of my evaluation by the MEB						
Strongly Agree	6	17.65	4	8.70	10	12.50
Agree	11	32.35	13	28.26	24	30.00
Neither Agree Nor Disagree	6	17.65	4	8.70	10	12.50
Disagree	5	14.71	7	15.22	12	15.00
Strongly Disagree	4	11.76	16	34.78	20	25.00
Don't Know	2	5.88	0	-	2	2.50
Missing	0	-	2	4.35	2	2.50
How easy was it for you to get medical records needed for your disability evaluation as part of the MEB?						
Very easy,	9	26.47	4	9.52	13	16.25
Somewhat easy,	11	32.35	5	11.90	16	20.00
Neither easy Nor difficult,	6	17.65	10	23.81	16	20.00
Somewhat difficult, or	4	11.76	11	26.19	15	18.75
Very difficult?	2	5.88	12	28.57	14	17.50
Don't Know	2	5.88	2	4.76	4	5.00
Missing	0	-	2	4.76	2	2.50
As part of the MEB, were you asked to resubmit any records or documents that you (or someone helping you) had already provided ?						
Yes	16	47.06	29	63.04	45	62.50
No	15	44.12	12	26.09	27	37.50
Don't Know	3	8.82	3	6.52	6	7.50
Missing	0	-	2	4.35	2	2.50
Compared to what you expected, do you think the MEB process was…						
Much longer,	12	35.29	19	40.43	31	38.27
Somewhat longer,	4	11.76	5	10.64	9	11.11
About what you expected,	12	35.29	8	17.02	20	24.69
Somewhat shorter, or	2	5.88	6	12.77	8	9.88
Much shorter?	0	-	2	4.26	2	2.47
Don't Know	4	11.76	4	8.51	8	9.88
Missing	0	-	3	6.38	3	3.70
The MEB process was fair						

Strongly Disagree	4	11.76	11	23.91	15	18.75
Disagree	5	14.71	9	19.57	14	17.50
Neither Agree Nor Disagree	7	20.59	11	23.91	18	22.50
Agree	12	35.29	7	15.22	19	23.75
Strongly Agree	3	8.82	3	6.52	6	7.50
Don't Know	2	5.88	3	6.52	5	6.25
Missing	1	2.94	2	4.35	3	3.75
The final MEB determination was fair						
Strongly Disagree	5	14.71	13	28.26	18	22.50
Disagree	6	17.65	8	17.39	14	17.50
Neither Agree Nor Disagree	5	14.71	5	10.87	10	12.50
Agree	13	38.24	7	15.22	20	25.00
Strongly Agree	3	8.82	8	17.39	11	13.75
Don't Know	2	5.88	3	6.52	5	6.25
Missing	0	-	2	4.35	2	2.50
PEB process						
I was kept informed of the status of my evaluation by the PEB						
Strongly Agree	2	5.88	10	21.74	12	15.00
Agree	5	14.71	7	15.22	12	15.00
Neither Agree Nor Disagree	8	23.53	8	17.39	16	20.00
Disagree	11	32.35	13	28.26	24	30.00
Strongly Disagree	6	17.65	3	6.52	9	11.25
Don't Know	2	5.88	2	4.35	4	5.00
Missing	0	-	3	6.52	3	3.75
How easy was it for you to get medical records needed for your disability evaluation as part of the PEB?						
Very easy,	11	32.35	6	13.04	17	21.25
Somewhat easy,	7	20.59	6	13.04	16	20.00
Neither easy Nor difficult,	6	17.65	8	17.39	14	17.50
Somewhat difficult, or	4	11.76	9	19.57	12	15.00
Very difficult?	4	11.76	10	21.74	12	15.00
Don't Know	2	5.88	4	8.70	6	7.50
Missing	0	-	3	6.52	3	3.75
As part of the PEB, were you asked to resubmit any records or documents that you (or someone helping you) had already provided ?						
Yes	11	32.35	26	56.52	37	46.25
No	18	52.94	13	28.26	31	38.75
Don't Know	5	14.71	4	8.70	9	11.25
Missing	0	-	3	6.52	3	3.75

Compared to what you expected, do you think the PEB process was…						
Much longer,	8	23.53	13	28.26	21	26.25
Somewhat longer,	5	14.71	8	17.39	13	16.25
About what you expected,	11	32.35	8	17.39	19	23.75
Somewhat shorter, or	4	11.76	5	10.87	9	11.25
Much shorter?	0	-	2	4.35	2	2.50
Don't Know	6	17.65	7	15.22	13	16.25
Missing	0	-	3	6.52	3	3.75
The PEB process was fair.						
Strongly Disagree	3	8.82	8	17.39	11	13.75
Disagree	5	14.71	9	19.57	14	17.50
Neither Agree Nor Disagree	9	26.47	8	17.39	17	21.25
Agree	13	38.24	10	21.74	23	28.75
Strongly Agree	1	2.94	3	6.52	4	5.00
Don't Know	3	8.82	5	10.87	8	10.00
Missing	0	-	3	6.52	3	3.75
The final PEB determination was fair.						
Strongly Disagree	3	8.82	9	19.57	12	15.00
Disagree	8	23.53	8	17.39	16	20.00
Neither Agree Nor Disagree	4	11.76	6	13.04	10	12.50
Agree	14	41.18	10	21.74	24	30.00
Strongly Agree	2	5.88	5	10.87	7	8.75
Don't Know	3	8.82	5	10.87	8	10.00
Missing	0	-	3	6.52	3	3.75
VA Claims Process						
The VA kept me informed about the status of my claim						
Strongly Disagree	7	20.59	13	28.26	20	25.00
Disagree	8	23.53	11	23.91	19	23.75
Agree	11	32.35	7	15.22	18	22.50
Strongly Agree	5	14.71	3	6.52	8	10.00
Don't Know	0	-	1	2.17	1	1.25
Missing	3	8.82	11	23.91	14	17.50
As part of the VA claims process, were you asked to resubmit any records or documents that you (or someone helping you) had already provided ?						
No	10	29.41	11	23.91	21	26.25
Yes	18	52.94	23	50.00	41	51.25
Don't Know	2	5.88	1	2.17	3	3.75

Missing	4	11.76	11	23.91	15	18.75
Compared to what you expected, do you think the VA claims process was…						
Much longer,	6	17.65	13	28.26	19	31.15
Somewhat longer,	4	11.76	8	17.39	12	19.67
About what you expected,	10	29.41	4	8.70	14	22.95
Somewhat shorter, or	2	5.88	2	4.35	4	6.56
Much shorter?	1	2.94	2	4.35	3	4.92
Don't Know	2	5.88	1	2.17	3	4.92
Missing	9	26.47	16	34.78	25	40.98
The VA claims process was fair						
Strongly Disagree	13	37.14	6	16.22	19	26.39
Disagree	8	22.86	4	10.81	12	16.67
Neither Agree Nor Disagree	4	11.43	10	27.03	14	19.44
Agree	2	5.71	2	5.41	4	5.56
Strongly Agree	2	5.71	1	2.70	3	4.17
Don't Know	3	8.57	3	8.11	6	8.33
Missing	3	8.57	11	29.73	14	19.44
The final VA determination was fair						
Strongly Disagree	9	24.32	8	18.60	17	21.25
Disagree	6	16.22	9	20.93	15	18.75
Agree	13	35.14	8	18.60	21	26.25
Strongly Agree	3	8.11	3	6.98	6	7.50
Don't Know	2	5.41	4	9.30	6	7.50
Missing	4	10.81	11	25.58	15	18.75
The VA kept me informed of the status of my claim						
Strongly Disagree	7	20.59	13	28.26	20	25.00
Disagree	8	23.53	11	23.91	19	23.75
Agree	11	32.35	7	15.22	18	22.50
Strongly Agree	5	14.71	3	6.52	8	10.00
Don't Know	0	-	1	2.17	1	1.25
Missing	3	8.82	11	23.91	14	17.50
How well do you understand the VA claims process?						
Not at all	4	11.76	7	15.22	11	13.75
somewhat	11	32.35	14	30.43	25	31.25
mostly	17	50.00	14	30.43	31	38.75
completely	2	5.88	5	10.87	7	8.75

Missing	0	-	6	13.04	6	7.50
Compared to what you expected, was the percent disability you were assigned…						
lower than expected	8	23.53	9	19.57	17	21.25
about what you expected	9	26.47	18	39.13	27	33.75
higher than expected	7	20.59	3	6.52	10	12.50
Don't Know	1	2.94	0	-	1	1.25
Missing	9	26.47	16	34.78	25	31.25
Family Support						
My family was included in the Disability Evaluation Process						
Strongly Disagree	9	26.47	20	43.48	29	36.25
Disagree	6	17.65	9	19.57	15	18.75
Neither Agree Nor dis	13	38.24	5	10.87	18	22.50
Agree	2	5.88	4	8.70	6	7.50
Strongly Agree	2	5.88	1	2.17	3	3.75
Don't Know	2	5.88	1	2.17	3	3.75
Missing	0	-	6	13.04	6	7.50
Did you see a clinician as part of the MEB?						
No	5	14.71	8	17.39	13	16.25
Yes	26	76.47	34	73.91	60	75.00
Don't Know	3	8.82	2	4.35	5	6.25
Missing	0	-	2	4.35	2	2.50
Clinician visit						
I was taken the exam room in reasonable time						
Strongly Disagree	0	-	1	2.94	1	1.67
Disagree	0	-	3	8.82	3	5.00
Neither Agree Nor dis	6	23.08	6	17.65	12	20.00
Agree	13	50.00	19	55.88	32	53.33
Strongly Agree	4	15.38	4	11.76	8	13.33
Missing	3	11.54	1	2.94	4	6.67
N/A	8		12		20	
The office staff at the clinicians office treated me with dignity and respect						
Strongly Disagree	0	-	3	8.57	3	4.92
Disagree	1	3.85	7	20.00	8	13.11
Neither Agree Nor dis	4	15.38	3	8.57	7	11.48
Agree	12	46.15	16	45.71	28	45.90

Strongly Agree	6	23.08	5	14.29	11	18.03
Missing	3	11.54	1	2.86	4	6.56
N/A	8		12		20	
The office staff at the doctors office was helpful						
Strongly Disagree	0	-	3	8.57	3	4.92
Disagree	1	3.85	4	11.43	5	8.20
Neither Agree Nor dis	5	19.23	7	20.00	12	19.67
Agree	13	50.00	16	45.71	29	47.54
Strongly Agree	4	15.38	4	11.43	8	13.11
Missing	3	11.54	1	2.86	4	6.56
N/A	8		12		20	
The clinician listened carefully to me						
Strongly Disagree	3	11.54	8	22.86	11	18.03
Disagree	2	7.69	7	20.00	9	14.75
Neither Agree Nor dis	1	3.85	4	11.43	5	8.20
Agree	13	50.00	12	34.29	25	40.98
Strongly Agree	4	15.38	3	8.57	7	11.48
Missing	3	11.54	1	2.86	4	6.56
N/A	8		12		20	

Table 7.2. Univariate Analysis of PTSD vs. No PTSD: Satisfaction/dissatisfaction with Assistance with the Process

Question	***PTSD***		***no PTSD***		***total***	
PEBLO	number	%	number	%	number	%
Did you have a PEBLO assigned to you?						
Yes	28	82.35	39	84.78	67	83.75
No	3	8.82	2	4.35	5	6.25
Don't know/can't remember	3	8.82	2	4.35	5	6.25
Missing	0	-	3	6.52	3	3.75
Did your PEBLO keep you informed about your case?						
Never	4	9.76	3	11.54	7	10.45
Sometimes	8	19.51	11	42.31	19	28.36
Usually	11	26.83	3	11.54	14	20.90
Always	15	36.59	8	30.77	23	34.33
Don't know	1	2.44	1	3.85	2	2.99
Missing	2	4.88	0	-	2	2.99

N/A	6		7		13	
Treat you with courtesy and respect?						
Never	3	7.50	2	7.41	5	7.46
Sometimes	4	10.00	4	14.81	8	11.94
Usually	4	10.00	4	14.81	8	11.94
Always	26	65.00	15	55.56	41	61.19
Don't know	1	2.50	1	3.70	2	2.99
Missing	2	5.00	1	3.70	3	4.48
N/A	6		7		13	
Help you as much as you thought he/she should?						
Never	4	9.52	5	20.00	9	13.43
Sometimes	8	19.05	5	20.00	13	19.40
Usually	8	19.05	6	24.00	14	20.90
Always	18	42.86	8	32.00	26	38.81
Don't know	2	4.76	1	4.00	3	4.48
Missing	2	4.76	0	-	2	2.99
N/A	6		7		13	
Listen carefully to you?						
Never	7	17.50	5	18.52	12	17.91
Sometimes	4	10.00	6	22.22	10	14.93
Usually	6	15.00	4	14.81	10	14.93
Always	20	50.00	10	37.04	30	44.78
Don't know	1	2.50	2	7.41	3	4.48
Missing	2	5.00	0	-	2	2.99
N/A	6		7		13	
Compile all the materials you needed for your case to move forward with the disability evaluation process?						
Never	7	18.92	3	10.00	10	14.93
Sometimes	2	5.41	6	20.00	8	11.94
Usually	7	18.92	5	16.67	12	17.91
Always	18	48.65	11	36.67	29	43.28
Don't know	1	2.70	5	16.67	6	8.96
Missing	2	5.41	0	-	2	2.99
N/A	6		7		13	
Case Manager						
Did you have a case manager assigned to you?						
No	8	23.53	6	13.04	14	17.50

Yes	20	58.82	31	67.39	51	63.75
Don't know	5	14.71	5	10.87	10	12.50
Missing	1	2.94	4	8.70	5	6.25
Did your case manager keep you informed about your case?						
Never	7	16.67	3	10.00	10	13.89
Sometimes	10	23.81	2	6.67	12	16.67
Usually	6	14.29	3	10.00	9	12.50
Always	7	16.67	11	36.67	18	25.00
Don't know	4	9.52	5	16.67	9	12.50
Missing	8	19.05	6	20.00	14	19.44
N/A	14		15		29	
Treat you with courtesy and respect?						
Never	3	6.98	0	-	3	4.11
Sometimes	7	16.28	2	6.67	9	12.33
Usually	4	9.30	5	16.67	9	12.33
Always	17	39.53	13	43.33	30	41.10
Don't know	4	9.30	4	13.33	8	10.96
Missing	8	18.60	6	20.00	14	19.18
N/A	14		15		29	
Help you as much as you thought he/she should?						
Never	5	11.90	1	3.33	6	8.33
Sometimes	11	26.19	4	13.33	15	20.83
Usually	5	11.90	2	6.67	7	9.72
Always	9	21.43	12	40.00	21	29.17
Don't know	4	9.52	5	16.67	9	12.50
Missing	8	19.05	6	20.00	14	19.44
N/A	14		15		29	
Listen carefully to you?						
Never	4	8.16	0	-	4	5.00
Sometimes	11	22.45	3	8.57	14	17.50
Usually	5	10.20	4	11.43	9	11.25
Always	10	20.41	12	34.29	22	27.50
Don't know	11	22.45	10	28.57	21	26.25
Missing	8	16.33	6	17.14	14	17.50
N/A	14		15		29	
Compile all the materials you needed for your case to move forward with the disability evaluation process?						

Never	8	25.81	2	6.67	10	14.08
Sometimes	8	25.81	3	10.00	11	15.49
Usually	2	6.45	4	13.33	6	8.45
Always	9	29.03	9	30.00	18	25.35
Don't know	4	12.90	8	26.67	12	16.90
Missing	8	25.81	6	20.00	14	19.72
N/A	14		15		29	
Coordinate with your PEBLO to ensure that your case moved smoothly?						
Never	9	21.95	1	3.57	10	14.29
Sometimes	6	14.63	5	17.86	11	15.71
Usually	4	9.76	3	10.71	7	10.00
Always	10	24.39	8	28.57	18	25.71
Don't know	4	9.76	6	21.43	10	14.29
Missing	8	19.51	6	21.43	14	20.00
N/A	14		15		29	

Table 7.3. Univariate Analysis of PTSD vs. No PTSD: Understanding of the IDES

Understanding of the process						
Question	***PTSD***		***no PTSD***		***total***	
MEB						
How well did you/do you understand the MEB process?	number	%	number	%	number	%
Not at all	1	2.94	11	23.91	12	15.00
Somewhat	11	32.35	14	30.43	25	31.25
Mostly	17	50.00	12	26.09	29	36.25
Completely	3	8.82	6	13.04	9	11.25
Don't Know	2	5.88	1	2.17	3	3.75
Missing	0	-	2	4.35	2	2.50
PEB						
How well did you/do you understand the PEB process?						
Not at all	13	28.26	2	5.88	15	18.75
Somewhat	12	26.09	14	41.18	26	32.50
Mostly	16	34.78	12	35.29	28	35.00
Completely	1	2.17	2	5.88	3	3.75
Don't Know	4	8.70	1	2.94	5	6.25
Missing	0	-	3	8.82	3	3.75
Clinician Visit						

The clinician explained things in a way that was easy for me to understand						
Strongly Disagree	5	13.51	4	16.67	9	14.75
Disagree	7	18.92	1	4.17	8	13.11
Neither agree nor dis	6	16.22	3	12.50	9	14.75
Agree	12	32.43	13	54.17	25	40.98
Strongly agree	4	10.81	2	8.33	6	9.84
Don't know	0	-	1	4.17	1	1.64
Missing	3	8.11	0	-	3	4.92
N/A	8		12		20	
Assistance						
Did you PEBLO explain the outcome at each stage of the process?						
Not at all	7	17.95	5	17.86	12	17.91
Somewhat	4	10.26	6	21.43	10	14.93
Mostly	8	20.51	7	25.00	15	22.39
Completely	17	43.59	7	25.00	24	35.82
Don't Know	1	2.56	3	10.71	4	5.97
Missing	2	5.13	0	-	2	2.99
N/A	6		7		13	
Did your case manager answer any questions you had about the process?						
Never	5	11.90	1	3.33	6	8.33
Sometimes	10	23.81	3	10.00	13	18.06
Usually	6	14.29	5	16.67	11	15.28
Always	9	21.43	10	33.33	19	26.39
Don't know	4	9.52	5	16.67	9	12.50
Missing	8	19.05	6	20.00	14	19.44
N/A	14		15		29	
						0.23
Did your case manager explain things in way that was easy to understand?						
Never	0	-	4	9.76	4	5.48
Sometimes	4	12.50	9	21.95	13	17.81
Usually	4	12.50	8	19.51	12	16.44
Always	12	37.50	9	21.95	21	28.77
Don't know	4	12.50	5	12.20	9	12.33
Missing	8	25.00	6	14.63	14	19.18
N/A	14		15		29	

Table 7.4. Univariate Analysis of PTSD vs. No PTSD: Outcomes

Question	*PTSD*		*no PTSD*		*total*	
	number	%	number	%	number	%
In general, how satisfied are you with your health?						
Very Dissatisfied	1	2.94	7	15.22	8	10.00
Dissatisfied	10	29.41	16	34.78	26	32.50
Satisfied	21	61.76	17	36.96	38	47.50
Very satisfied	2	5.88	0	-	2	2.50
Missing	0	-	6	13.04	6	7.50
In general, would you say your health is…						
Poor	2	5.88	11	23.91	13	16.25
Fair	16	47.06	19	41.30	35	43.75
Good	13	38.24	10	21.74	23	28.75
Very Good	3	8.82	0	-	3	3.75
Missing	0	-	6	13.04	6	7.50

Table 6. Bivariate Analysis of Confounding Variables: Gender

	Male		Female		p-value
Satisfaction Domains	number	%	number	%	
MEB					
The MEB process was fair .					
Disagree	18	38.30	11	44.00	
Agree	29	61.70	14	56.00	
					0.639
The final MEB determination was fair.					
Disagree	21	43.75	11	44.00	
Agree	27	56.25	14	56.00	
					0.984
PEB					
The PEB process was fair.					
Disagree	17	37.78	8	33.33	
Agree	28	62.22	16	66.67	
					0.715
The final PEB determination was fair.					
Disagree					
Agree	18	40.00	10	41.67	
	27	60.00	14	58.33	
VA claim					0.893
The VA claims process was fair.					

Disagree	20	55.56	15	62.50	
Agree	16	44.44	9	37.50	
					0.593
The final VA determination was fair.					
Disagree	18	51.43	14	58.33	
Agree	17	48.57	10	41.67	
					0.601
PEBLO					
Help you as much as you thought he/she should?					
No	13	32.50	9	40.91	
Yes	27	67.50	13	59.09	
					0.508
Case Manager					
Help you as much as you thought he/she should?					
No	15	48.39	6	33.33	
Yes	16	51.61	12	66.67	
					0.305
Understanding Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	35	92.11	19	76.00	
Understand	3	7.89	6	24.00	
					0.074
PEB					
How well did you/do you understand the PEB process?					
Didn't understand	33	97.06	21	91.30	
Understand	1	2.94	2	8.70	
					0.34
VA Claim					
How well did you/do you understand the VA Claims process?					
Didn't understand	25	83.33	17	89.47	
Understand	5	16.67	2	10.53	
					0.55
Health Outcome Domains					
In general, would you say your health is?					
Poor-fair	27	57.45	21	77.78	
Good-very good	20	42.55	6	22.22	
					0.078
Time Domains					

MEB					
35 weeks or less	22	43.14	14	48.28	
36 weeks or more	29	56.86	15	51.72	
					0.657
PEB					
5 weeks or less	28	54.90	11	37.93	
6 weeks or more	23	45.10	18	62.07	
					0.144
VA Claims					
12 weeks or less	21	41.18	7	24.14	
13 weeks or more	30	58.82	22	75.86	
					0.125
Table 12. Age					
	39 years and under		40 years and over		p-value
Satisfaction Domains	n	%	n	%	
MEB					
The MEB process was fair .					
Disagree	15	39.47	14	41.18	
Agree	23	60.53	20	58.82	
					0.883
The final MEB determination was fair.					
Disagree	16	41.03	16	47.06	
Agree	23	58.97	18	52.94	
					0.604
PEB					
The PEB process was fair.					
Disagree	12	31.58	13	41.94	
Agree	26	68.42	18	58.06	
					0.373
The final PEB determination was fair.					
Disagree	15	39.47	13	41.94	
Agree	23	60.53	18	58.06	
					0.373
VA claim					
The VA claims process was fair.					
Disagree	15	39.47	13	41.94	
Agree	23	60.53	18	58.06	
					0.836
The final VA determination was fair.					
Disagree	16	53.33	19	63.33	
Agree	14	46.67	11	36.67	
					0.703
PEBLO					

Help you as much as you thought he/she should?					
No	9	28.13	13	43.33	
Yes	23	71.88	17	56.67	
					0.211
Case Manager					
Help you as much as you thought he/she should?					
No	7	26.92	14	60.87	
Yes	19	73.08	9	39.13	
					0.017*
Understanding Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	27	79.41	27	93.10	
Understand	7	20.59	2	6.90	
					0.122
PEB					
How well did you/do you understand the PEB process?					
Didn't understand	30	93.75	24	96.00	
Understand	2	6.25	1	4.00	
					0.706
VA Claim					
How well did you/do you understand the VA Claims process?					
Didn't understand	19	79.17	23	92.00	
Understand	5	20.83	2	8.00	
					0.199
Health Outcome Domains					
In general, would you say your health is?					
Poor-fair	22	59.46	26	70.27	
Good-very good	15	40.54	11	29.73	
					0.33
Time Domains					
MEB					
35 weeks or less	16	39.02	20	51.28	
36 weeks or more	25	60.98	19	48.72	
					0.271
PEB					
5 weeks or less	16	39.02	23	58.97	
6 weeks or more	25	60.98	16	41.03	

					0.074
VA Claims					
12 weeks or less	16	39.02	12	30.77	
13 weeks or more	25	60.98	27	69.23	
					0.439

Table 7.5. Bivariate Analysis of Confounding Variables: Education

	High school/vocational school		College and/or graduate school		p-value
Satisfaction Domains	number	%	number	%	
MEB					
The MEB process was fair .					
Disagree	20	43.48	9	34.62	
Agree	26	56.52	17	65.38	
					0.461
The final MEB determination was fair.					
Disagree	22	47.83	10	37.04	
Agree	24	52.17	17	62.96	
					0.37
PEB					
The PEB process was fair.					
Disagree	15	34.88	10	38.46	
Agree	28	65.12	16	61.54	
					0.764
The final PEB determination was fair.					
Disagree	18	42.86	10	37.04	
Agree	24	57.14	17	62.96	
					0.631
VA claim					
The VA claims process was fair.					
Disagree	22	57.89	19	67.86	
Agree	16	42.11	9	32.14	
					0.928
The final VA determination was fair.					
Disagree	20	54.05	12	54.55	
Agree	17	45.95	10	45.45	
					0.971
PEBLO					
Help you as much as you thought he/she should?					
No	14	35.90	8	34.78	
Yes	25	64.10	15	65.22	
					0.929
Case Manager					

Help you as much as you thought he/she should?					
No	13	41.94	8	44.44	
Yes	18	58.06	10	55.56	
					0.864
Understanding Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	34	85.00	20	86.96	
Understand	6	15.00	3	13.04	
					0.831
PEB					
How well did you/do you understand the PEB process?					
Didn't understand	35	97.22	19	90.48	
Understand	1	2.78	2	9.52	
					0.271
VA Claim					
How well did you/do you understand the VA Claims process?					
Didn't understand	27	84.38	15	88.24	
Understand	5	15.63	2	11.76	
					0.713
Health Outcome Domains					
In general, would you say your health is?					
Poor-fair	30	65.22	18	64.29	
Good-very good	16	34.78	10	35.71	
					0.935
Time Domains					
MEB					
35 weeks or less	21	41.18	18	64.29	
36 weeks or more	30	58.82	10	35.71	
					0.362
PEB					
5 weeks or less	22	43.14	17	58.62	
6 weeks or more	29	56.86	12	41.38	
					0.183
VA Claims					
12 weeks or less	14	27.45	14	48.28	
13 weeks or more	37	72.55	15	51.72	
					0.06

Table 7.6. Bivariate Analysis of Confounding Variables: Race

	White		Minority		p-value
Satisfaction Domains	n	%	n	%	
MEB					
The MEB process was fair .					
Disagree	21	42.00	8	36.36	
Agree	29	58.00	14	63.64	
					0.653
The final MEB determination was fair.					
Disagree	23	45.10	9	40.91	
Agree	28	54.90	13	59.09	
					0.741
PEB					
The PEB process was fair.					
Disagree	15	31.91	10	45.45	
Agree	32	68.09	12	54.55	
					0.276
The final PEB determination was fair.					
Disagree	19	39.58	9	42.86	
Agree	29	60.42	12	57.14	
					0.799
VA claim					
The VA claims process was fair.					
Disagree	26	60.47	9	52.94	
Agree	17	39.53	8	47.06	
					0.594
The final VA determination was fair.					
Disagree	23	54.76	9	52.94	
Agree	19	45.24	8	47.06	
					0.899
PEBLO					
Help you as much as you thought he/she should?					
No	14	31.82	8	44.44	
Yes	30	68.18	10	55.56	
					0.346
Case Manager					
Help you as much as you thought he/she should?					
No	16	45.71	5	35.71	
Yes	19	54.29	9	64.29	
					0.523
Understanding					

Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	38	84.44	16	88.89	
Understand	7	15.56	2	11.11	
					0.649
PEB					
How well did you/do you understand the PEB process?					
Didn't understand	36	94.74	18	100.00	
Understand	2	5.26	0		
					0.227
VA Claim					
How well did you/do you understand the VA Claims process?					
Didn't understand	28	84.85	14	87.50	
Understand	5	15.15	2	12.50	
					0.804
Health Outcome Domains					
In general, would you say your health is?					
Poor-fair	34	64.15	14	66.67	
Good-very good	19	35.85	7	33.33	
					0.838
Time Domains					
MEB					
35 weeks or less	23	40.35	13	56.52	
36 weeks or more	34	59.65	10	43.48	
					0.188
PEB					
5 weeks or less	26	45.61	13	56.52	
6 weeks or more	31	54.39	10	43.48	
					0.377
VA Claims					
12 weeks or less	19	33.33	9	39.13	
13 weeks or more	38	66.67	14	60.87	
					0.623

Table 7.8. Bivariate Analysis of Confounding Variables: Duty Status

	Mobilized Guard or Reserve		Active Duty		p-value
Satisfaction Domains	number	%	number	%	
MEB					
The MEB process was fair .					

Disagree	16	48.48	12	31.58	
Agree	17	51.52	26	68.42	
					0.146
The final MEB determination was fair.					
Disagree	18	54.55	13	33.33	
Agree	15	45.45	26	66.67	
					0.07
PEB					
The PEB process was fair.					
Disagree	14	43.75	10	27.78	
Agree	18	56.25	26	72.22	
					0.169
The final PEB determination was fair.					
Disagree	15	48.39	12	32.43	
Agree	16	51.61	25	67.57	
					0.181
VA claim					
The VA claims process was fair.					
Disagree	21	72.41	14	45.16	
Agree	8	27.59	17	54.84	
					0.032*
The final VA determination was fair.					
Disagree	18	64.29	14	45.16	
Agree	10	35.71	17	54.84	
					0.141
PEBLO					
Help you as much as you thought he/she should?					
No	10	37.04	12	35.29	
Yes	17	62.96	22	64.71	
					0.888
Case Manager					
Help you as much as you thought he/she should?					
No	11	50.00	10	38.46	
Yes	11	50.00	16	61.54	
					0.422
Understanding Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	22	81.48	31	88.57	
Understand	5	18.52	4	11.43	
					0.432

PEB					
How well did you/do you understand the PEB process?					
Didn't understand	23	92.00	30	96.77	
Understand	2	8.00	1	3.23	
					0.43
VA Claim					
How well did you/do you understand the VA Claims process?					
Didn't understand	20	90.91	21	80.77	
Understand	2	9.09	5	19.23	
					0.321
Health Outcome Domains					
In general, would you say your health is?					
Poor-fair	23	67.65	25	62.50	
Good-very good	11	32.35	15	37.50	
					0.587
Time Domains					
MEB					
35 weeks or less	14	40.00	22	50.00	
36 weeks or more	21	60.00	22	50.00	
					0.375
PEB					
5 weeks or less	19	54.29	20	45.45	
6 weeks or more	16	45.71	24	54.55	
					0.435
VA Claims					
12 weeks or less	11	31.43	17	38.64	
13 weeks or more	24	68.57	27	61.36	
					0.506

Table 7.9. Bivariate Analysis of Confounding Variables: Percent Disability

	80% or less		90% or more		p-value
Satisfaction Domains	n	%	n	%	
MEB					
The MEB process was fair .					
Disagree	5	45.45	15	36.59	
Agree	6	54.55	26	63.41	
					0.591
The final MEB determination was fair.					
Disagree	7	58.33	15	36.59	
Agree	5	41.67	26	63.41	
					0.179

PEB					
The PEB process was fair.		3	25.00	13	34.21
Disagree	9	75.00	25	65.79	
Agree					0.551
The final PEB determination was fair.					
Disagree	5	41.67	13	34.21	
Agree	7	58.33	25	65.79	
					0.639
VA claim	8	61.54	16	55.17	
The VA claims process was fair.		5	38.46	13	44.83
Disagree					
Agree					0.7
The final VA determination was fair.					
Disagree	9	69.23	13	46.43	
Agree	4	30.77	15	53.57	
					0.173
PEBLO					
Help you as much as you thought he/she should?					
No	6	60.00	11	31.43	
Yes	4	40.00	24	68.57	
					0.1
Case Manager					
Help you as much as you thought he/she should?					
No	3	42.86	12	44.44	
Yes	4	57.14	15	55.56	
					0.94
Understanding Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	9	90.00	30	85.71	
Understand	1	10.00	5	14.29	
					0.725
PEB					
How well did you/do you understand the PEB process?					
Didn't understand	8	88.89	30	96.77	
Understand	1	11.11	1	3.23	
					0.339
VA Claim					

How well did you/do you understand the VA Claims process?					
Didn't understand	5	83.33	26	86.67	
Understand	1	16.67	4	13.33	
					0.829
Health Outcome Domains					
In general, would you say your health is?					
Poor-fair	5	35.71	29	72.50	
Good-very good	9	64.29	11	27.50	
					0.014
Time Domains					
MEB					
35 weeks or less	6	42.86	20	43.48	
36 weeks or more	8	57.14	26	56.52	
					0.967
PEB					
5 weeks or less	10	71.43	21	45.65	
6 weeks or more	4	28.57	25	54.35	
					0.091
VA Claims					
12 weeks or less	8	57.14	9	19.57	
13 weeks or more	6	42.86	37	80.43	
					0.006

Table 7.10. Bivariate Analysis of Confounding Variables: Health Status

	rated health poor-fair		rated health good-very good		p-value
Satisfaction Domains	n	%	n	%	
MEB					
The MEB process was fair .					
Disagree	21	46.67	6	26.09	
Agree	24	53.33	17	73.91	
					0.101
The final MEB determination was fair.					
Disagree	26	56.52	5	21.74	
Agree	20	43.48	18	78.26	
					0.006*
PEB					
The PEB process was fair.					
Disagree	21	46.67	4	19.05	
Agree	24	53.33	17	80.95	
					0.031*
The final PEB determination was fair.		21	47.73	7	31.82

Disagree	23	52.27	15	68.18	
Agree					
					0.218
VA claim					
The VA claims process was fair.		23	63.89	12	50.00
Disagree	13	36.11	12	50.00	
Agree					
					0.285
The final VA determination was fair.					
Disagree	23	63.89	12	50.00	
Agree	13	36.11	12	50.00	
					0.589
PEBLO					
Help you as much as you thought he/she should?					
No	11	28.21	10	50.00	
Yes	28	71.79	10	50.00	
					0.098
Case Manager					
Help you as much as you thought he/she should?					
No	16	53.33	5	29.41	
Yes	14	46.67	12	70.59	
					0.113
Understanding Domains					
MEB					
How well did you/do you understand the MEB process?					
Didn't understand	33	84.62	17	85.00	
Understand	6	15.38	3	15.00	
					0.969
PEB					
How well did you/do you understand the PEB process?					
Didn't understand	35	94.59	16	94.12	
Understand	2	5.41	1	5.88	
					0.943
VA Claim					
How well did you/do you understand the VA Claims process?					
Didn't understand	30	88.24	12	80.00	
Understand	4	11.76	3	20.00	
					0.448
Health Outcome Domains					
In general, would you say your health					

is?					
Poor-fair	-	-	-	-	
Good-very good	-	-	-	-	
					-
Time Domains					
MEB					
35 weeks or less	19	39.58	16	61.54	
36 weeks or more	29	60.42	10	38.46	
					0.071
PEB					
5 weeks or less	23	47.92	16	61.54	
6 weeks or more	25	52.08	10	38.46	
					0.263
VA Claims					
12 weeks or less	19	39.58	9	34.62	
13 weeks or more	29	60.42	17	65.38	
					0.674

Table 7.11. Sensitivity Analysis

	PTSD					No PTSD				
Question	***top 2 vs. bottom 3***		***top 3 vs. bottom 2***		***% changed group***	***top 2 vs. bottom 3***		***top 3 vs. bottom 2***		***% changed group***
Question	n	%	n	%		n	%	n	%	
MEB process										
"I was kept informed of the status of my evaluation by the MEB"										
Disagree	27	61.36	23	71.88		15	46.88	9	20.45	
Agree	17	38.64	21	65.63		17	53.13	23	52.27	
					8.70					17.65
How easy was it for you to get medical records needed for your disability evaluation as part of the MEB?										
Difficult	33	78.57	21	65.63		12	37.50	10	23.81	
Easy	9	21.43	21	65.63		20	62.50	22	52.38	
					23.81					17.65
Compared to what you expected, do you think the MEB process was …										
Longer or about what I expected	32	80.00	24	80.00		28	93.33	16	40.00	
Shorter	8	20.00	16	53.33		2	6.67	14	35.00	
					17.02					17.02
The MEB process was fair .										
Disagree	31	75.61	20	64.52		16	51.61	9	21.95	
Agree	10	24.39	21	67.74		15	48.39	22	53.66	
					20.59					23.91
The final MEB determination was fair .										

Disagree	26	63.41	21	65.63		16	50.00	11	26.83	
Agree	15	36.59	20	62.50		16	50.00	21	51.22	
					10.87					14.71
PEB process										
"I was kept informed of the status of my evaluation by the PEB"										
Disagree	25	60.98	17	53.13		15	46.88	7	17.07	
Agree	16	39.02	24	75.00		17	53.13	25	60.98	
					17.39					23.53
How easy was it for you to get medical records needed for your disability evaluation as part of the PEB?										
Easy	24	61.54	16	50.00		14	43.75	10	25.64	
Difficult	15	38.46	23	71.88		18	56.25	22	56.41	
					17.39					17.65
Compared to what you expected, do you think the PEB process was ...										
Longer or about what I expected	29	80.56	21	75.00		24	85.71	13	36.11	
Shorter	7	19.44	15	53.57		4	14.29	15	41.67	
					17.39					32.35
The PEB process was fair .										
Disagree	25	65.79	17	54.84		17	54.84	8	21.05	
Agree	13	34.21	21	67.74		14	45.16	23	60.53	
					17.39					26.47
The final PEB determination was fair .										
Disagree	23	60.53	17	54.84		15	48.39	11	28.95	
Agree	15	39.47	21	67.74		16	51.61	20	52.63	
					13.04					11.76
VA Claims Process										
Compared to what you expected, do you think the VA claims process was ...										
Longer or about what I expected	25	86.21	21	91.30		20	86.96	10	34.48	
Shorter	4	13.79	8	34.78		3	13.04	13	44.83	
					8.70					29.41
The VA claims process was fair .										
Disagree	19	59.38	19	67.86		16	57.14	16	50.00	
Agree	13	40.63	13	46.43		12	42.86	12	37.50	
					27.03					11.43
The final VA determination was fair .										
Disagree	15	70.59	15	53.57		17	60.71	17	54.84	
Agree	16	51.61	16	57.14		11	39.29	11	35.48	
					18.60					35.14
Was the VA rating you received...										
Lower	17	70.83	9	30.00		27	90.00	8	33.33	
About what you expected or higher	7	29.17	21	70.00		3	10.00	16	66.67	
					39.13					26.47

Family Support										
My family was included in the Disability Evaluation Process										
Disagree	34	87.18	29	87.88		28	87.50	15	65.22	
Agree	5	12.82	10	30.30		4	12.50	17	73.91	
					10.87					38.24
Clinician Visit										
I was taken to the exam room in a reasonable time										
Disagree	6	26.09	4	12.12		10	30.30	0	-	
Agree	17	73.91	29	87.88		23	69.70	23	100.0	
					17.65					23.08
I was treated by the clinician with dignity and respect										
Disagree	5	21.74	10	29.41		13	38.24	1	4.35	
Agree	18	78.26	24	70.59		21	61.76	22	95.65	
					8.57					15.38
The staff at the doctors office was helpful										
Disagree	6	26.09	7	20.59		14	41.18	1	4.35	
Agree	17	73.91	27	79.41		20	58.82	22	95.65	
					20.00					19.23
The clinician listened to me										
Disagree	6	26.09	15	44.12		19	55.88	5	21.74	
Agree	17	73.91	19	55.88		15	44.12	18	78.26	
					5.00					3.85

Table 7.12. Subgroup Analysis: Women

Question	***no PTSD***		***PTSD***		***total***		***p-value***
MEB Process	number	%	number	%	number	%	
Compared to what you expected, do you think the MEB process was..							
Longer	7	58.33	6	46.15	13	52.00	
Shorter	5	41.67	7	53.85	12	48.00	
							0.695
The MEB process was fair .							
Disagree	5	41.67	6	46.15	11	44.00	
Agree	7	58.33	7	53.85	14	56.00	
							1
The final MEB determination was fair .							
Disagree	4	33.33	7	53.85	11	44.00	
Agree	8	66.67	6	46.15	14	56.00	
							0.428

PEB process							
Compared to what you expected, do you think the PEB process was…							
Longer	6	54.55	5	41.67	11	47.83	
Shorter	5	45.45	7	58.33	12	52.17	
							0.684
The PEB process was fair							
Disagree	4	33.33	4	33.33	8	33.33	
Agree	8	66.67	8	66.67	16	66.67	
							1
The final PEB determination was fair							
Disagree	5	41.67	5	41.67	8	26.67	
Agree	7	58.33	7	58.33	22	73.33	
							1
VA Claims Process							
Compared to what you expected, do you think the VA claims process was …							
Longer	6	66.67	8	80.00	14	73.68	
Shorter	3	33.33	2	20.00	5	26.32	
							0.628
The VA claims process was fair .							
Disagree	8	72.73	6	46.15	15	62.50	
Agree	3	27.27	7	53.85	9	37.50	
							0.24
The final VA determination was fair .							
Disagree	8	72.73	6	46.15	22	70.97	
Agree	3	27.27	7	53.85	9	29.03	0.24
Compared to what you expected was your rating…							
Lower	2	22.22	3	30.00	5	26.32	
About the percentage you expected or higher	7	77.78	7	70.00	14	73.68	
							1

Table 7.13. Subgroup Analysis: Reservists/National Guard

Question	***no PTSD***		***PTSD***		***total***		***p-value***
	number	%	number	%	number	%	
Compared to what you expected, do you think the MEB process was..							
Longer	7	58.33	14	63.64	21	61.76	
Shorter	5	41.67	8	36.36	13	38.24	
							1

The MEB process was fair							
Disagree	5	41.67	11	52.38	16	48.48	
Agree	7	58.33	10	47.62	17	51.52	
							0.721
The final MEB determination was fair							
Disagree	6	50.00	12	57.14	18	54.55	
Agree	6	50.00	9	42.86	15	45.45	
							0.731
PEB process							
Compared to what you expected, do you think the PEB process was…							
Longer	4	44.44	13	65.00	17	58.62	
Shorter	5	55.56	7	35.00	12	41.38	
							0.422
The PEB process was fair							
Disagree	5	41.67	9	45.00	14	43.75	
Agree	7	58.33	11	55.00	18	56.25	
							1
The final PEB determination was fair							
Disagree	6	54.55	9	45.00	15	48.39	
Agree	5	45.45	11	55.00	16	51.61	
							0.716
VA Claims Process							
Compared to what you expected, do you think the VA claims process was…							
Longer	3	33.33	10	66.67	13	54.17	
Shorter	6	66.67	5	33.33	11	45.83	
							0.206
The VA claims process was fair							
Disagree	9	75.00	12	70.59	21	72.41	
Agree	3	25.00	5	29.41	8	27.59	
							1
The final VA determination was fair							
Disagree	9	75.00	9	56.25	18	64.29	
Agree	3	25.00	7	43.75	10	35.71	
							0.434
Compared to what you expected was your rating…							
Lower	3	37.50	8	50.00	11	45.83	
About the percentage you expected or higher	5	62.50	8	50.00	13	54.17	
							0.679

Appendix H. Institutional Review Board Approval

FWA #00000287

JHSPH Institutional Review Board Office

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INITIAL APPLICATION
EXEMPT DETERMINATION NOTICE

Date: July 9, 2012

To: Shannon Frattaroli, Ph.D., M.P.H.
(Molly Simmons)
Department of Health Policy & Management

Re: **Study Title**: "From Congressional Action to Clinical Outcome: An Occupational Health Case Study of the Military's IDES Disability Scale and its Impact on Mental Health Care of Soldier Amputees"
IRB No: 00004498

The JHSPH IRB reviewed the above-referenced application on **June 28, 2012**, and determined that the human subjects research activity described in your application for Aim 1 meets the criteria for Exemption under 45 CFR 46.101(b), Category (3).

This determination is inclusive of the following documentation:

- **Research Plan (Version 3, June 27, 2012)**
- **Oral Consent Script (Version 3, June 27, 2012)**
- **Interview Guide (Version 3)**
- **Email Script (June 27, 2012)**

Any change to the research activity must be submitted to the IRB before implementation to assure that it does not change the Exempt determination. Otherwise, no further IRB review is required.

If you have any questions regarding this action, please contact the JHSPH IRB Office at (410) 955-3193 or via email at irboffice@jhsph.edu.

ES/teb

Attachment (1): Exempt Research Categories: Federal Regulations 45 CFR 46.101

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Institutional Review Board Office

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FWA #00000287

EXEMPT DETERMINATION
AMENDMENT NOTICE

Date: May 26, 2015

To: Shannon Frattaroli, PHD, MPH
Department of Health Policy & Management

Re: **Study Title**: "From Congressional Action to Clinical Outcome: An Occupational Health Case Study of the Military's IDES Disability Scale and its Impact on Mental Health Care of Soldier Amputees"
IRB No: 00004498

The JHSPH IRB reviewed the amendment request (received 5/6/15 as an email request) for the above-referenced study on **May 26, 2015**. We have determined that the proposed change described below will not alter the current Exempt determination under 45 CFR 46.101(b), Category (3). The Exempt determination date for this study remains **June 28, 2012**.

- To include additional questions and a short descriptive paragraph to the survey instrument.

This determination is inclusive of the following documentation:

- [redacted]

Any change to the research activity must be submitted to the IRB before implementation to ensure that it does not change the Exempt determination. The IRB does not require continuing review or submission of a progress report for studies determined as exempt from federal regulations. Every three (3) years from the date of exempt determination, you will be contacted for an update on whether or not to keep the exempt study active in our records.

If you have any questions regarding this action, please contact the JHSPH IRB Office at (410) 955-3193 or via email at jhsph.irboffice@jhu.edu.

ES/tob
Attachment (1). Exempt Research Categories: Federal Regulations 45 CFR 46.101

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OEF/OIF veterans. Neuropsychology review. 2012 Mar;22(1):21-34. PubMed PMID: 22350690.
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Assistant Secretary of Defense for Health Affairs, Office of the Secretary of Defense, Department
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Curriculum Vitae

Molly Simmons
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Department of Health Policy and Management
624 N. Broadway St.
Baltimore, MD 21205

Education:

Johns Hopkins Bloomberg School of Public Health — **Baltimore, MD**
2010-present

- Ph.D. Candidate, Health Policy and Management
- Health and Public Policy Track, Concentration in Injury Control and Prevention
- Dissertation: "The Integrated Disability Evaluation System and PTSD: The Political Life-Cycle of Military Policy from Concept to Evaluation"
- Dissertation research includes primary qualitative data collection and analysis and survey development, data collection and analysis

Harvard University — **Cambridge, MA**
2001-2005

- B.A. with honors in Social Anthropology
- Certificate of Public Health Policy, June 2005
- Thesis: "Facing Morality: Post Traumatic Stress Disorder in Israeli Soldiers Serving During the Intifada," awarded *magna cum laude* written thesis and *suma cum laude* for oral thesis defense

Research Experience:

RAND Corporation — **Washington, DC**
Arroyo Center — October 2014-present
Adjunct Staff
Project:

- Investigate the authority and mechanisms by which the Secretary of the VA may furnish health care to veterans at non-Veterans Administration facilities
- Compile and interpret regulatory and legislative documents governing this authority
- Make recommendations concerning authority based on this in-depth document review

RAND Corporation — **Boston, MA**
Arroyo Center — June 2014-October 2014
Summer Associate with Dr. Carrie Farmer, Ph.D. and Ms. Terri Tanielian, M.A.
Projects:

- Researched mild Traumatic Brain Injury (mTBI) in the Military Health Care system, focused on service members requiring persistent care

- Conducted relative risk analysis to investigate patterns of care and risk factors for requiring persistent care
- Wrote chapter on persistent care for RAND Report on mTBI in the Military Healthcare System
- Presented findings on persistent care to expert advisory panel

- Investigated training evaluation measures for Welcome Back Veterans, a group which funds training for PTSD treatment for community care providers
  - Asked to remain on Adjunct Staff to write a paper on best practices for training evaluation
  - Coded over 1,000 items within training measures and compiled a database for groups to compare and select evaluation items

Johns Hopkins Bloomberg School of Public Health **Baltimore, MD**
Center for Injury Research and Policy 2010-present
Department of Health Policy and Management
Graduate Researcher with Dr. Steve Bowman, Ph.D.
Project:

- Utilized secondary data analysis of the National Emergency Department database
- Evaluated impact of helmet use on severity of head injuries,
- Created study design and the analytical plan
- Analyzed ski and snowboard injury data using odds ratios
- Performed extensive literature review of descriptive studies on ski and snowboard injuries and the impact of helmets on head injuries for athletes

Johns Hopkins Bloomberg School of Public Health **Baltimore, MD**
Center for Injury Research and Policy 2012-present
Department of Health Policy and Management
Graduate Researcher with Dr. Shannon Frattaroli Ph.D.
Project:

- Analyzed national survey data on residential sprinkler systems as a injury mitigation device
- Wrote paper on the policy implications of survey findings

Johns Hopkins Bloomberg School of Public Health **Baltimore, MD**
Center for Injury Research and Policy 2012-present
Department of Health Policy and Management
Graduate Researcher with Dr. Elizabeth LeTourneau

- Developed a database of federal funding and legislative action on child sexual abuse treatment and prevention
- Investigated agency level grant awards for child sexual abuse and treatment

Johns Hopkins Bloomberg School of Public Health **Baltimore, MD**
Center for Injury Research and Policy 2012-2013
Department of Health Policy and Management
Graduate Researcher with Dr. Renan Castillo, Ph.D.
Project:

- Worked with one of the country's largest occupational injury insurers, utilizing claims data to evaluate rehabilitation guidelines and pain management
- Responsible for systematic literature review of several rehabilitation guidelines and practices

Baltimore, MD

Johns Hopkins Bloomberg School of Public Health 2011-2012
Center for Injury Research and Policy
Department of Health Policy and Management
Graduate Researcher with Dr. Keisha Pollack, Ph.D. and Mr. David Swedler, M.P.H.
Project:

- Descriptive study of occupational homicides of law enforcement officers in the United States in the years 1996-2009
- Performed narrative text analysis of FBI database of written descriptions of encounters that resulted in the death of one or more law enforcement officer(s)

Johns Hopkins Bloomberg School of Public Health **Baltimore, MD**
Department of Health Policy and Management 2011
Department of Health Behavior and Society
Graduate Researcher with Dr. Shannon Frattaroli, Ph.D.
Project:

- Evaluated county low-income health insurance plan through focus groups
- Responsible for organizing focus groups

National Park Service **Washington, DC**
Public Risk Management Project 2010
Risk Management Intern with Dr. Sara Newman, Ph.D.
Project:

- Compiled literature review of wilderness injury prevention techniques
- Developed best practices guidelines for wilderness injury prevention used by all federal land management agencies
- Assisted with data management of project to evaluate preventative search and rescue
- Created "Junior Ranger" game to teach children about injury prevention measures for hiking, based on best practice guidelines

Johns Hopkins Bloomberg School of Public Health **Baltimore, MD**
Center for Injury Research and Policy 2009
Department of Health Policy and Management
Graduate Researcher with Dr. Shannon Frattaroli, Ph.D. and Asst. Dean Steve Terret, J.D.
Project:

- Compiled literature review on injuries and state laws associated with TASER and stun guns
- Made recommendations to state legislator and law enforcement based on literature review

Harvard University **Cambridge, MA**
Department of Anthropology 2004-2005
Senior Thesis
Project:

- Wrote senior honors thesis on cultural influences of PTSD diagnoses in Israel
- Conducted key informant interviews during field work in Israel
- Compiled literature review on PTSD, Israeli history and PTSD interventions in Israel
- Coded and assembled data from document review and key informant interviews

Teaching Experience:

Johns Hopkins Bloomberg School of Public Health **2011-Present**
Teaching Assistant

- Served as lead teaching assistant for large introductory class on health policy where I managed a team of three assistants
- Served as teaching assistant for Seminar in Injury Prevention Policy, Health Policy Analysis and Synthesis, Health Policy Formulation, and Introduction to Health Policy
- Developed course content, advised students, organized class materials and syllabus, invited guest speakers and ran laboratory sections

Work Experience:

Congressman Peter DeFazio **Washington, DC**
Press Secretary 2007-2010

- Managed aggressive, proactive, rapid response local and national press operation for both the personal and subcommittee offices of a Subcommittee Chairman
- Wrote press releases, newsletters and opinion editorials
- Managed reporter relations, scheduling interviews, organizing press conferences, pitching stories and an extensive database of press activities
- Created long term and short term media strategies to advance Congressman's priorities

Congressman John Sarbanes **Washington, DC**
Legislative Correspondent/Legislative Aide 2006-2007

- Responsible for legislative portfolio that included health appropriations, natural resources, environment, agriculture, telecommunications, homeland security and budgetary issues
- Authored legislation, provided analytical information and advised the Congressman on how to vote in these issue areas
- Managed constituent correspondence program

Awards and Honors:

Student Abstract Award, Law Section 2015
American Public Health Association

Center for Qualitative Studies in Health Dissertation Award 2014-2015
Johns Hopkins Bloomberg School of Public Health

Nancy Robertson Fellowship in Injury Prevention 2010-2012
Johns Hopkins Bloomberg School of Public Health

William Hadden Fellowship in Injury Prevention 2010-2012
Insurance Institute for Highway Safety

Cordeiro Health Policy Research Grant 2004-2005
Kennedy School of Government

Certificate in Health Policy 2005
Harvard University

2004

Crichton Summer Travel Grant
Harvard Medical School

Published Papers:
Swedler DI, Kercher C, Simmons MM, Pollack KM. 2013. Occupational Homicide of Law Enforcement Officers in the U.S., 1996-2010. Injury Prevention, May 31, 2013.

Swedler, DI, Simmons MM, Hemenway D, Dominici F. Firearm Prevalence and Homicides of Law Enforcement Officers in the United States. American Journal of Public Health. October 2015

Published Report:
Carrie M. Farmer, Heather Krull, Thomas Concannon, Molly Simmons, Francesca Pillemer, Teague Ruder, Andrew Parker, Maulik P. Purohit, Liisa Hiatt, Benjamin Batorsky, Kimberly A. Hepner. "Understanding Treatment of Mild Traumatic Brain Injury in the Military Health System" RAND Report, expected publication January 2016

Published Abstracts:
Simmons MM, Swedler DI, Kerr S. Injury surveillance of head, neck and facial injuries in collegiate ice hockey players, 2009-2014. [online]
https://apha.confex.com/apha/143am/webprogram/Person292176.html

Simmons MM, Frattaroli S, Rutkow L. Collaborating with policymakers to produce applied research: A case study of the military's Integrated Disability Evaluation System. [online]
https://apha.confex.com/apha/143am/webprogram/Paper336197.html

Simmons MM, Frattaroli S, Rutkow H. A case study of the military's Integrated Disability Evaluation System: Utilizing the political process to advance the public's health. [online]
https://apha.confex.com/apha/142am/webprogram/Paper304816.html

Simmons, MM, Bowman S, Swedler DI Emergency Department Utilization for Skiing and Snowboarding Injuries. [online]
https://apha.confex.com/apha/142am/webprogram/Paper309312.html

Swedler D, Simmons M, Kercher C, Pollack K. Occupational homicides of law enforcement officers in the United States, 1996-2009. [online]
https://apha.confex.com/apha/139am/webprogram/Paper253600.html

Conference Presentations:
Simmons MM, Swedler DI, Kerr S. Injury surveillance of head, neck and facial injuries in collegiate ice hockey players, 2009-2014. November 2015. American Public Health Association Annual Conference, Chicago IL

Simmons MM, Frattaroli S, Rutkow L. Collaborating with policymakers to produce applied research: A case study of the military's Integrated Disability Evaluation System. November 2015. American Public Health Association Annual Conference, Chicago IL

Simmons MM, Bowman S., Swedler DI. Emergency Department Utilization for Skiing and Snowboarding Injuries. November 2014. American Public Health Association Annual Conference, New Orleans, LA

Castillo RC, Heins SE, Feldman DF, Roberts E, Wu A, Simmons, M, Medford A, Trujillo A. Development and cost implications of quality of care indicators for shoulder and back injuries. June, 2013. Academy Health Annual Conference, Baltimore, MD

Bowman S, Simmons M. Emergency Department Utilization for Skiing and Snowboarding Injuries, February 28, 2013. Association for Marketing and Health Care Research Annual Meeting, Big Ski, MT

Swedler D, Simmons M, Kercher C, Pollack K. Occupational homicide of law enforcement officers in the United States, 1996-2009. November 2, 2011. American Public Health Association Annual Meeting, Washington, DC.

Conference Posters:

Simmons MM, Frattaroli S, Rutkow H. A case study of the military's Integrated Disability Evaluation System: Utilizing the political process to advance the public's health. November 2014. American Public Health Association Annual Conference, New Orleans, LA

Simmons M, Frattaroli S, Rutkow H. A case study of the military's Integrated Disability Evaluation System: Utilizing the political process to advance the public's health. June 2014. AcademyHealth Annual Conference. San Diego, CA

Simmons M, Bowman S., Swedler DI Emergency Department Utilization for Skiing and Snowboarding Injuries. June 2014. AcademyHealth Annual Conference. San Diego, CA

Publications in Progress:

Simmons MM, Bowman S Emergency Department Utilization for Skiing and Snowboarding Injuries

Simmons MM, Bowman S, Swedler DI Geographical distribution of Ski and Snowboard Injuries and Implications for Policy

Frattaroli S, Pollock K, Gielen A, Simmons MM Opportunities to Advance Residential Sprinkler Policy Based on User Survey

Castillo R, Heins S, Trujillo A, Feldman D, Simmons, MM, DuGoff E, Roberts E, Wegener S, Wu A, Anderson G. Development and Cost Implications of Quality of Care Indicators for Shoulder and Back Injuries

Professional Leadership Positions:

Co-Chair, Student Coordinating Committee 2011-2012
Johns Hopkins Bloomberg School of Public Health
Department of Health Policy and Management

Professional Memberships
AcademyHealth 2014
American Public Health Association 2012-2014